

THE PRACTITIONER'S HANDBOOKS
HYSTERIA & NEURASTHENIA

By J. MICHELL CLARKE, M.A. M.D. (Camb.) F.R.C.P.

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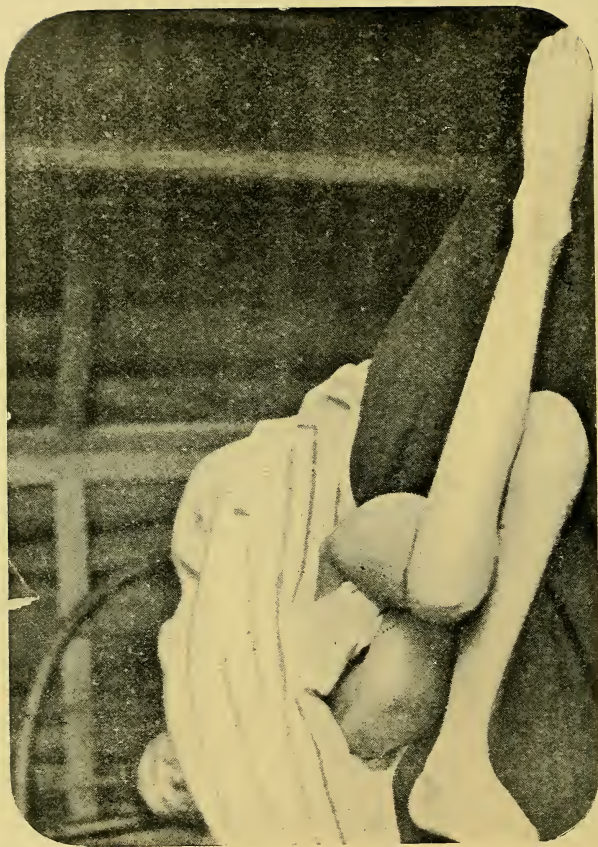
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PRACTITIONER'S HANDBOOKS—II.

EDITED BY HARRY ROBERTS

HYSTERIA &
NEURASTHENIA



HYSTERIC CONTRACTURES OF LOWER LIMBS
(See p. 57.)

HYSTERIA & NEURASTHENIA

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P R E F A C E

I HAVE attempted in this little book to give a concise account of Hysteria and Neurasthenia. The clinical aspect of these diseases has been kept in view throughout. The literature of the subject is now so enormous that without very greatly exceeding my limits it was obviously impossible to deal at all fully with it, but it would not be right for me not to acknowledge, even thus imperfectly, my great indebtedness to former writers, and especially the more recent ones, on Hysteria and Neurasthenia. The perusal of their works, so many of them distinguished by wealth of observation and breadth of knowledge, makes me fully conscious of my own shortcomings. Whilst, however, my endeavour has been to keep within moderate limits, and to give the results of my own clinical observation, I trust that I have left out nothing of importance, and that this little work may prove of some service as a practical guide, and that the statements made in it have at least the merits of accuracy and clearness. I have thought it advisable to consider Traumatic Hysteria and Neurasthenia

in a separate chapter towards the end of the book.

It is my pleasant duty here to acknowledge the courtesy of the proprietors of the *Lancet* in allowing me to reproduce some of the illustrations to a paper on Hysteria which I published in their journal, and also to thank three of my colleagues for three other illustrations.

JOHN MICHELL CLARKE.

CLIFTON, *June* 1904.

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HYSTERIA

CHAPTER I

INTRODUCTION

THE term Hysteria has come down to us from classical times, and although the views held in ancient days and also in the middle ages, by which the disease was connected with disorders of the womb (*ὑστέρα*), have long lost credence, the name which conveyed the old theories as to its origin is still retained. The attempts that have been made to replace the word Hysteria by names more in accordance with modern ideas have failed to gain acceptance, and the historical interest attached to the word may perhaps counterbalance some disadvantages attending its use. These disadvantages chiefly arise from the popular ideas which in the course of ages have become attached to the name, and in using the word Hysteria to the laity the doctor must remember that the majority of people have either one of two fixed ideas with regard to it. They either think that patients suffering from hysteria are "shamming," or that at least a little resolution or effort of will would enable them to get rid of their symptoms, or on the other hand that the disorder is due to some

sexual irregularity or excess. From the medical point of view, however, now that to medical men it has lost its former connotations, hysteria is probably as convenient a term as any other for a group of symptoms too wide and too varied to be easily comprised under a precise term of description, and of whose real nature and origin we have not yet sufficient knowledge to indicate exactly the pathological process at work.

This want of precise and intimate knowledge of the inner workings of the disease must render unsatisfactory any attempt at an accurate definition of hysteria. Its chief features will appear when we come to discuss the symptoms ; meanwhile it may be said that hysteria is not to be used as a term under which cases presenting various ill-defined symptoms of nervous disorder may be conveniently classed. The work of recent years, and especially the labours of Charcot and the French school, have tended to crystallise the vague notions of the disease into a more definite form, and to establish certain positive symptoms as characteristic of it. Unfortunately these positive signs are not invariably present, and there must always occur cases in which it is difficult to say whether they should be assigned to hysteria or not.

Perhaps we cannot at present go usefully forward in the direction of a definition further than to say that in hysteria there is a peculiar state of disturbance of the central nervous system, affect-

ing primarily and most profoundly the highest cerebral centres, as is evidenced by the mental and emotional characteristics that belong to the disease, but most commonly or obviously betraying itself by some derangement of action of lower cerebral centres. These disorders result either from influences originating from within the central nervous system itself or affecting it from without, and are of such a nature that they give no sign in any part of their course of the existence of any organic change—that is to say, of any structural modification either of the nervous system as a whole or of the part of it chiefly concerned in any particular case. As the symptoms of hysteria are thus always expressed in terms of disorder of “function,” of a defect in action apart from structural change, the term “functional” is sometimes applied to them, but the use of this term is not advisable as a synonym for hysteria, because it is too wide in meaning, and would lead to an increase of that vagueness in the conception of the disease, from which its study has already too much suffered.

ETIOLOGY

Race.—No race is exempt from hysteria, but it is more common in some than in others; thus the Jewish race is especially prone to suffer from it, and it appears to be more frequent, at any rate in a severe form, in France, than in Germany

or England. In Britain hysteria seems to be more rife amongst the "Celtic" part of the population. Hysteria is no disease of modern civilisation, although the forms which it has assumed in different ages have varied with the conditions of life and the prevailing beliefs of the time. There are well-authenticated records of its frequency and severity in the middle ages, and in the seventeenth and eighteenth centuries.

Sex.—With regard to sex it is undoubtedly far more common amongst women, but men often suffer from it, and cases in children are frequent enough. Very different statements are made as to the proportion of men to women affected; they vary from 1-17 (Germany) to 1-3 (Paris). Hysteria is more frequent in men of the lower than of the upper classes. The numbers in children are practically equal, so that, as would be expected, sex in them has no influence.

Age.—As to age in women, the greatest number of cases occur between fifteen and twenty-five years, in men between twenty and thirty, and in children between ten and fifteen years.

Inheritance.—Whilst all allow the influence of heredity, there is considerable difference of opinion as to the part played by it. Some authors follow Charcot in considering heredity to be the only predisposing cause, and all others as exciting agents merely (*agents provocateurs*). It is difficult, however, to accept this extreme view, as in many instances hysteria appears for

the first time as the direct result of a definite cause, and in such cases we should be forced, in the absence of evidence, to assume an hereditary predisposition. Moreover, it can hardly be supposed that in epidemic outbreaks of hysteria, such as occasionally occur in convents, schools, and similar institutions, that all the inmates are hereditarily prone to the disease. Whilst admitting, however, that hysteria may arise *de novo* from an adequate cause, there can be no doubt that there is most frequently an hereditary taint. An hysterical mother not infrequently has hysterical daughters. In such a case, however, the influence of the environment on the children of hysterical parents must also be taken into account. The early life and training of a girl brought up by an hysterical mother is, apart from direct inheritance, excellently calculated to sow the seeds of the disorder in her. The influence of the home is very great in this respect—constant preoccupation about trivial ailments, discussions in the family about health, and over-anxiety on the part of the elder members about slight deviations from it, may confirm and aggravate a tendency to hysteria in the children. Further, a large number of hysterical patients present a neurotic family history; on inquiry, it is found that the parents or near relatives have suffered from some neurosis other than hysteria, such as epilepsy, convulsions, asthma, chorea, or from insanity, or from some nervous

disease. Alcoholism in the parents is, I believe, a frequent and important factor in the appearance of hysteria in the children; and amongst other diseases, at any rate in the poorer classes, a family history of tuberculosis is most often obtained. Hysteria in childhood shows most frequently the presence of direct inheritance or of a neurotic family taint; in hysteria in men this is least evident.

Personal Antecedents.—In the patients themselves anæmia and chlorosis deserve mention, as being frequently the precursor of an outbreak of hysteria, but considering that the majority of cases occur in girls just at the age at which chlorosis is also common among them, this may not be more than a coincidence. Very often deterioration of the general health, the patient being in a condition of lowered vitality, in which the nutrition of the nervous system suffers, precedes an attack of hysteria. Of late years influenza may be credited with a real share in giving rise to such a condition. The onset of the catamenia does not seem to have any special influence, nor does disease of the sexual organs *ipso facto* induce hysteria. Sexual excess and sexual irregularities on account of their exhausting effect, and, in the case of the latter, of its prejudicial action in many ways upon the nervous system, would increase a predisposition to hysteria, and possibly in some cases act more directly.

Mention must also here be made of the so-called

“toxic hysteria”; that is, the occurrence of hysterical symptoms of the ordinary kind as the result of the action of various poisons—*e.g.* lead, alcohol, mercury; the habit of secret drinking should be borne in mind as a possible explanation of the appearance of hysteria for the first time in an adult woman.¹

Hysteria may also appear as a sequel to an acute illness followed by long and tedious convalescence, such as scarlet fever, acute rheumatism, or enteric fever; or in the course of prolonged and exhausting illnesses, or of local affections of organs necessitating painful treatment, such as diseases of joints, or of the pelvic organs in women; and it may occur as a troublesome complication of organic nervous disease.

Exciting Causes.—In many cases there is a distinct and definite exciting cause of an attack of hysteria, this may provoke an attack at once, or only after a short interval; the direct sequence of cause and effect is perhaps most readily traced in the paroxysmal forms of the disease. Of exciting causes (*agents provocateurs* of the French) the emotions hold the first place: fright, terror, such as are produced by a sudden terrible accident, by a fire, the sight of death, or of a person in a fit; grief, from the loss of a dear relative; disappointment, especially desertion by a lover, or the breaking off of an engagement; or the

¹ Ormerod, art. Hysteria, Allbutt's "System of Medicine," vol. viii.

unexpected failure of a long cherished hope. Of a less sudden kind the depressing emotions connected with family troubles, with loss of property, a descent in the social scale, or an uncongenial marriage and the like are important. The nursing of a sick relative, especially if death ends a prolonged illness, is particularly prone to produce hysteria in a predisposed person.⁶ A secret grief or a cause of anxiety that cannot be communicated to others, or the knowledge of a past misdeed for which discovery is feared are probably potent agents, and when the real cause of the attack is of this kind it may only come to the doctor's knowledge accidentally or indirectly, and often a long time afterwards. Some authors consider that even a severe grief, emotion, or anxiety if it can be communicated to friends entails little danger of provoking hysteria, whilst one of less intensity, if of necessity concealed, is a powerful cause of hysterical symptoms. The psychic impressions connected with such suppressed griefs or emotions form a group lying, so to speak, latent and outside the ordinary consciousness, and then apart from the patient's will or knowledge may give rise to hysterical phenomena of various kinds.¹

Traumatism amongst directly physical causes plays a particularly important part and will be considered later.

¹ See *Studien über Hysterie*, von Dr. J. Breuer und Dr. S. Freud. Wein, 1895.

CHAPTER II

GENERAL CONSIDERATION OF HYSTERICAL SYMPTOMS

The Hysterical Disposition.—If we admit the existence of an inherited predisposition there should be certain general signs characterising the hysterical patient, and allowing for the variability and protean character of hysterical manifestations, there are certain such general characteristics. The hysterical subject is one of variable moods, of an emotional, excitable temperament, easily exalted and easily depressed, tears and laughter equally readily follow on insufficient cause. One important feature is the way in which the emotions quickly influence the motor, vasomotor, sensory and secretory functions of the body.¹ Lack of constancy or inability for sustained effort is another characteristic, due probably to a deficient power of attention; in fact, a too ready accessibility to the passing impressions of the moment, or in other words, an increased suggestibility will frequently be noted. Signs of this kind have long been matter of

¹ Oppenheim, *Neuere Arbeiten über Hysterie. Die Therapie der Gegenwart*, No. 12, p. 539.

common observation, and are naturally most pronounced in female patients, often associated with much vivacity and a vivid imagination, and seen in pronounced form in the long and exaggerated statements of ailments on which the patient is ready to dilate. Such persons will have had a series of the most remarkable illnesses, at which no one wonders more than themselves that they live to tell the tale.

Such evidence of the character of the person with whom we have to deal is not, however, always forthcoming in hysteria; many patients suffering from severe hysterical manifestations betray no sign of this classical disposition: they are quiet, restrained, show little emotion or desire to talk of their ailments, and may even appear apathetic.

Features common to Hysterical Patients.—To a certain extent some general features may be postulated as common to hysterical disorders. The hysterical fits, when present, are clearly due to a functional disturbance.

The more permanent hysterical symptoms, such as various paralyses and anæsthesias, frequently appear as the immediate consequence of a fit.

Such hysterical disabilities are capable of modification, especially by emotional or psychic causes, or by some trivial occurrence in a way that in organic disease would be most improbable.

Hysterical symptoms, even when severe and

of long duration, may suddenly disappear, may undergo some remarkable change, such as transference to the opposite side of the body, or may be replaced by a totally different disability.

Thus to some extent variability is a feature of hysterical conditions, but this is a rule to which there are many exceptions.

Hysterical symptoms have not that effect on the general well-being and on the mental state which similar symptoms due to organic disease would cause, *e.g.* the patient may suffer little or no inconvenience from an anæsthetic limb. There is thus a want of correspondence between the symptoms present and the disturbances which we should naturally expect to arise from them. The patients do not behave as if they were seriously ill, and rarely lose their self-consciousness and regard for personal appearance. There is no regular course of development or order in the progress of the symptoms. The course taken by the illness is often irregular and capricious in a way for which the known features of organic disease afford no possible explanation.

Lastly there is no one positive and unequivocal sign of organic nervous disease present; if such a sign is found, the disease is not hysteria pure and simple.

"Stigmata," or Pathognomonic Signs of Hysteria.
—To avoid the errors that often result from a diagnosis made by exclusion, positive signs

of hysteria have been sought which would enable us to say at once and without possibility of mistake that hysteria is present. To the French school we owe the description of the so-called "stigmata" of the disease. These are certain signs which occur with great frequency, and often persist over long periods of time. Moreover they are valuable as being outside the patient's own knowledge and observation; indeed they may escape the notice of the medical attendant unless he specially searches for them. The most important are (1) disturbances of common sensation (anæsthesia, hyperæsthesia); (2) disorders of the special senses, especially concentric contraction of the visual fields; (3) hysterogenic zones; (4) convulsions.

When these signs are present they certainly afford valuable and positive evidence of the existence of hysteria, and would suffice to turn the balance in the presence of a symptom of doubtful nature. Unfortunately they are by no means of universal occurrence, and their absence does not exclude hysteria in any particular case. Further, anæsthesia does not seem so general in hysterical cases in England as in France, and this still more applies to hysterogenic zones, which are rarely present here in a typical form.

Division of Symptoms into (1) Paroxysmal, (2) Inter-paroxysmal.—In taking the symptoms of hysteria in detail they may be conveniently divided into (1) the Paroxysmal, (2) the Inter-

paroxysmal. It should be added that in most cases a number of symptoms of different nature are present side by side, but this is not always so. In some patients there is only one symptom, the so-called "mono-symptomatic" hysteria, and cases of this kind often give great difficulty in diagnosis. Further, although for convenience the symptoms may be divided into paroxysmal and inter-paroxysmal, there is no hard and fast line to be drawn between them; the one group merges into the other by insensible gradations.

CHAPTER III

PAROXYSMAL MANIFESTATIONS OF HYSTERIA

Hysterical Fits.—Of the paroxysmal manifestations of hysteria the fits are the most frequent : thus of forty consecutive female cases, I find thirty-four had suffered from fits of some kind.

As commonly seen in this country, there are two forms of hysterical fit : (1) the more severe form ; and (2) the milder or abortive attack, the common “fit of hysterics.”

In (1) the more severe and complete type of fit, the attack begins (*a*) by a premonitory period ending in the aura, and passes into (*b*) the stage of tonic contraction or general rigidity, (*c*) a further stage of exaggerated or convulsive movements, followed generally by (*d*) a period of delirious talking or wild raving. Taking each of these stages in order, the premonitory stage lasts for a longer or shorter time, minutes to hours, the patient suffering from a feeling of malaise, or of headache, or an undefined sense of unrest.

Aura.—The aura, if complete, generally consists of pain in the ovarian region, or of a sensation, painful or indescribable, which rises from the pit of the stomach, or sometimes from the feet

to the throat or head ; in the throat of a sensation of a ball there ("globus"), so that the patient feels she cannot swallow or that she will be suffocated ; of violent palpitation ; of various sensations in the head, such as dizziness, noises in the ears, dimness of sight, or of intense pain, or a feeling of painful pressure, at one spot on the head ("clavus").

Thus the symptoms of the aura afford considerable variety, and it may be represented by only one or two of them.

The Convulsion.—From the aura the patient passes into the fit, and falls to the ground. The fall is, however, rather gradual than sudden, and the patient rarely sustains any injury from it. She often screams out, and then lies *apparently* unconscious. The eyelids are closed, or rapidly opened and shut ; any attempt to separate them is resisted ; they are often tremulous : the pupils slightly dilated, react to light ; the corneal reflex is present : the eyeballs may be in convergent strabismus or turned upwards. The limbs become stiff and rigid, in a position of extension, and the back is arched so that the body is in opisthotonus, and in a well-marked case rests on the back of the head and the heels. This opisthotonic position is somewhat characteristic. This stage of rigidity lasts much longer than the period of tonic spasm in an epileptic fit—less usually the stage of rigidity is absent and the patient lies limp and inert.

Movements now begin which are purposeful in character ; that is to say, more co-ordinated and elaborate than the clonic spasms of epilepsy. Frequently they begin by alternate arching of the back in opisthotonus and forcible bringing down of the buttocks against the floor ; alternated again with flexion and extension of the limbs, or the sufferer rolls over and over on the floor, or sits up and throws herself back, tears her clothes from off her neck and chest, and tears at her hair. She struggles when held, may scream loudly, and sometimes tries to bite. Some such series of movements may be repeated several times. During the first part of this stage of exaggerated movements the face is flushed, and the eyes closed ; later the eyes are open. The pupils act to light throughout ; the tongue is not bitten ; there is sometimes, not generally, a little frothing at the mouth ; and the urine and fæces are not passed involuntarily.

Stage of " Delirium."—The fit concludes with a longer or shorter period in which the patient talks wildly, with intervals of sobbing or crying. She may repeatedly demand to be reassured on some subject of anxiety, such as the constancy of a lover, or to be comforted on some point, such as the faithlessness of a friend, or sometimes she may appear to be describing the scenes in a dream, or passes into a dream-like state in which she describes, as it were, a phantasmagoria passing before her eyes ; and in this case the hallucina-

tions are usually of a sombre and unpleasing character. (Charcot.)

From a condition of this kind the patient may after a few sighs recover, and somewhat quickly regain her normal state. There is, however, a great liability to relapse, and several of these attacks may occur, separated by short intervals, in the course of a few hours. The period of delirium may be entirely absent, and the patient quietly come round after the stage of exaggerated movements. This is especially apt to be the case in men. It is doubtful whether in a fit of the above kind there is ever absolute loss of consciousness. The prolonged stupor or heavy sleep that often follows an epileptic fit is absent. After the attack the patient frequently passes a large quantity of pale watery urine.

Milder Forms of Attack.—Very frequently some of the features of a complete fit as above described are absent, and all varieties or gradations occur to those mild forms in which the attack is represented merely by the sensation of "globus" or "clavus," or an "all gone" sensation arising from the stomach, followed by an outbreak of sobbing or tears, or uncontrollable laughter. Thus the simplest form of attack is that in which there is "globus" and a paroxysmal display of emotions. In other mild forms of the attack, which are very common, the patient gradually falls or slides to the ground and lies stretched

out with the limbs motionless : when she is raised there is generally slight rigidity of the limbs. The eyelids are closed, or there is a rapid flickering of them. The patient sighs or moans from time to time. Out of these attacks there may be a quiet awakening. Consciousness is not completely lost, the patients lying in a state of partial stupor, from which they can be aroused or made to get up, if sharply addressed. Towards the end of these attacks there is sometimes a period of delirium almost as well marked as when convulsions are present, and very frequently the patients tear at their hair or clothes when beginning to recover. Still other of these milder attacks closely resemble attacks of syncope, so that the different forms may very imperfectly represent the more fully developed fit. In all varieties the premonitory period with more or fewer of the phenomena of the aura immediately preceding the attack is fairly constant : the period of delirium is the next least seldom absent ; whilst the stage of tonic spasm is often very imperfectly represented.

Hystero-Epileptic Attack.—The hystero-epileptic attack (*Grande Hystérie*, Charcot) was first described in detail by Charcot from his observations at the Salpêtrière, and is regarded by him as the complete form of the hysterical fit ; milder varieties representing more or less imperfectly the various stages of the full attack. It is so rarely seen in this country that its interest is

rather theoretical than practical.¹ I have once seen a complete attack of this very severe kind in a woman of the lowest class who was admitted to hospital one Saturday night after a drunken row in a poor street. I append a scheme of the chief features of the fit of hystero-epilepsy :—

*Episodes of the Full Attack of Hystero-Epilepsy
(Grande Hystérie).*

1. Premonitory symptoms. Auras.

- | | | | |
|---|--|---|----------------------------------|
| 2. Stages
of the
attack
proper | a. Epileptoid
period. | { | 1. Phase of tonic contraction. |
| | | | 2. Phase of clonic contraction. |
| | | | 3. Phase of resolution. |
| | b. Period of
contortions
and of
"clownism." | { | 1. Phase of illogical attitudes. |
| 2. Phase of "grands mouvements." | | | |
| | c. Period of passionate (emotional) attitudes. | | |
| | d. Period of delirium. | | |

3. Terminal phenomena. Contractions, paralyses, &c.

In concluding this section, and before giving the points of distinction between an epileptic fit and one of hysteria as ordinarily witnessed, it

¹ Note that French authors state that the full attack with regular succession of periods is rarely seen, and that only one or two of the periods are commonly present, ended by the fourth stage.

should be mentioned that an epileptic seizure may, by reason of the severe perturbation of the nervous system caused by it, give rise to the occurrence of an hysterical paroxysm. In such a case, as is pointed out by Gowers, the epileptic fit may be mild and of brief duration, and escape observation from the much more striking manifestations of hysteria which immediately follow on it. Further, there is a difference of opinion as to the real nature of the epileptoid stage in hysterio-epilepsy which is regarded by some physicians as an epileptic attack followed by hysteria.

Diagnosis of an Hysterical from an Epileptic Fit.

— Practically speaking, the point of greatest importance is to make sure that one is dealing with an hysterical and not with an epileptic fit. If the medical man is so fortunate as to witness an attack, the distinction as a rule can be made without difficulty ; but in the majority of cases, both of hysteria and of epilepsy, the diagnosis has to be made from the statements of the patients themselves and of their friends. The chief points of distinction are the following : it may be premised that it is from fits of general epilepsy that the diagnosis has to be made, cases of localised or Jacksonian epilepsy are not likely to resemble hysterical attacks, and further that, as mentioned above, an epileptic attack may be the direct excitant of an hysterical fit immediately succeeding it.

Hysteria.

Often an emotional cause.
 Aura often prolonged and elaborate.
 Onset gradual.
 Injury from falling absent.
 Tongue not bitten.
 Urine and fæces never passed.
 Loud screams or cries in course of fit.
 Loss of consciousness not complete.
 Patient may remember fit or some part of it.
 Fit frequently followed by stage of delirium : patient rapidly recovers normal condition after fit.
 Fit is frequently repeated.
 Time of onset not during sleep.
 Attack may be cut short by various means.

Epilepsy.

No definite cause for attack.
 If present, generally of momentary duration.
 Onset sudden.
 Injury from sudden fall common.
 Most frequently bitten.
 Urine often passed and sometimes fæces.
 One cry at onset.
 Consciousness completely lost.
 No memory of period of fit.
 No delirium ; patient may be confused, stuporous, or fall into deep sleep after fit.
 As a rule, single.
 Frequently nocturnal, or in early morning.
 Ends spontaneously.

OTHER PAROXYSMAL MANIFESTATIONS

Attacks of Hysterical Sleep or Trance.—Amongst other paroxysmal manifestations of hysteria are : 1. Attacks of sleep, hysterical lethargy or trance. This very curious condition has been known from ancient times and forms the foundation of many of the stories in which a person has narrowly escaped being buried alive. In

these attacks the patient passes into a condition of deep sleep. The onset varies. (1) Very frequently the attack succeeds a fit, the patient passing into the lethargic state after one of the stages of the paroxysm ; (2) the patient suddenly falls into sleep during the performance of some ordinary action ; and (3) the patient passes out of a natural into the hysterical sleep. In the latter case there is generally complaint of headache, or of a dull confused feeling in the head for a short period preceding the attack. Thus in one instance a patient who had previously suffered from various hysterical symptoms, including fits, one morning did not come downstairs, and on going to her room her friends found her in a deep sleep which lasted three days.

The attacks vary much in severity ; thus in some the patient can be easily aroused by calling loudly to her, shaking or pricking her : in others the stimulus must be more intense and be applied for a prolonged period before any effect is produced ; and in the most severe cases she cannot be roused at all. When the patient can be aroused, the stimulus is often only effectual for a short time ; after a little while she relapses again into slumber.

In attacks of moderate severity the appearance is as of one in a quiet, deep sleep. In more severe cases of longer duration the face is pale, and there is emaciation from defective nutrition.

It is rare for consciousness to be completely

lost; although the patient cannot speak and makes no sign, she is cognisant to a variable degree of what is going on around her. In most cases there is great variation in the degree of lethargy from time to time; the patient may suddenly burst out laughing or crying, or may show sign of consciousness by blushing deeply when addressed. In the midst of profound lethargy she may suddenly wake up for a few minutes or hours; thus a patient who had been in a profound trance for two weeks, woke up, ate a hearty meal of beef and vegetables, and relapsed into sleep for another three weeks before recovery took place. As in natural sleep, the patients may from time to time change the position of the body or limbs; if the bedclothes are pulled off the body, they may draw them back again.

The eyes are closed, and the eyelids resist attempts to open them: the eyelids may show a quivering movement; the pupils act to light; the conjunctival reflex may be present or absent. The tendon reflexes are present, and also the abdominal; the plantar are frequently absent. The muscles are generally relaxed, but great variations occur in this respect. The body and limbs may be rigid, and the condition as to relaxation or rigidity of muscles varies in different parts of the body, and during the course of the same illness, from time to time. The muscles of the jaw (mastication) are as a

rule contracted. In some cases tonic or clonic contractions affecting various muscular groups occur, and these may usher in a convulsive attack.

In some cases the cataleptic state is present, and the limbs show the condition known as *flexibilitas cerea*, in which they remain for a long time in any position in which they are placed. The illustration is taken from a girl who was in a state of hysterical sleep for nearly three weeks; the arms remained in the position shown in the photograph for an hour and a half, and gradually fell on to the bed, first one and then the other (see Figs. 1 and 2).

In severe attacks of sleep of long duration the urine and fæces are passed into the bed unconsciously. The respiration may be normal, but is generally slow, infrequent, and the respiratory movements shallow. It is said sometimes to take on the Cheyne-Stokes rhythm. The pulse may be normal in rate or may be quickened, perhaps most frequently is slow. In cases of so-called "apparent death," or in which attacks of "hysterical syncope" occur, both respiration and pulse are from time to time so feeble as to be detected with difficulty. The temperature is normal in a mild attack; in severe attacks it is subnormal.

In long standing attacks there is difficulty in maintaining the nutrition of the patients, and they become emaciated. In such cases the



FIG. 1. CATALEPTIC CONDITION IN A CASE OF HYSTERICAL SLEEP

See p. 26

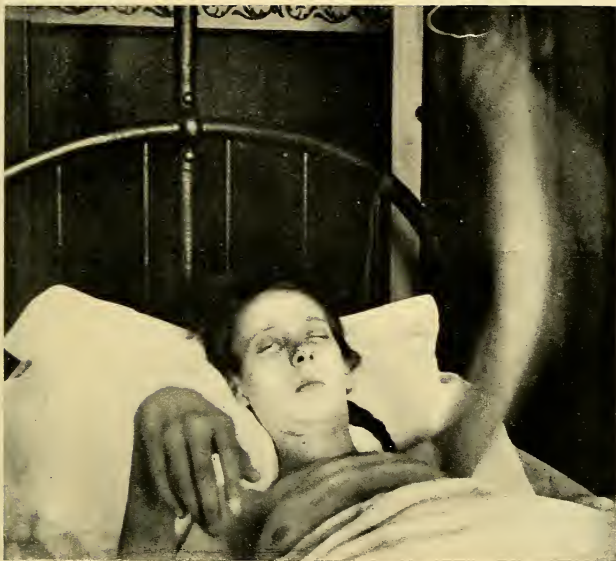


FIG. 2. FROM THE SAME CASE AS FIG. 1; TAKEN ABOUT AN HOUR AFTER
FIG. 1. THE RIGHT ARM HAS GRADUALLY DROPPED AND THE
LEFT ARM HAS BECOME TREMULOUS

changes in the metabolism of the body and in the excretions, which have been stated by Gilles de la Tourette and Cathelineau to be present in all long lasting hysterical phenomena, and which will be described later, are found to occur. The spasm of the muscles of mastication is often a great source of difficulty in feeding the patients.

The attack may end by an hysterical fit, after which the patient recovers; more commonly they wake up as if from a natural sleep. This recovery is gradual; there is a return to the waking state for short periods, with relapses into lethargy, the periods of waking becoming longer and more frequently repeated until recovery is complete.

The duration of the attack is very variable, from a few hours to days, weeks, or even months in the most severe forms. After the attacks, if at all severe, the patients are weak and languid, and some time elapses before they regain good health. In the majority of cases there is after recovery no remembrance of what has taken place during the attack; in others there is, however, a partial memory of some events that have occurred in it, but memory fails for certain periods. This memory for certain phases of the illness is to be connoted with some well-authenticated instances in which the patient lay inaccessible to the action of all external stimuli and in so deep a trance as to be taken for dead, but yet preserved the sense of hearing.

Catalepsy.—Catalepsy, as mentioned above, is a phenomenon occasionally seen in hysteria. It sometimes accompanies or succeeds the fits, in which case the different cataleptic attitudes are assumed under the influence of hallucinations. It may, however, occasionally occur apart from convulsive attacks as the primary and dominant symptom. In such cases the cataleptic condition may come on quite suddenly, often after slight prodromnal symptoms of headache, faintness, &c., in the midst of some ordinary action. The muscles become rigid, and the patient is suddenly arrested in the middle of an action and remains statue-like, with rigid muscles, for a variable time. If passive movement of the patient's body or limbs is attempted, it will be found that considerable force is required to overcome the rigidity of the muscles. This rigidity, which generally involves the whole body, but may affect only one side, as a rule soon passes off, and the condition above described of *flexibilitas cerea* appears, in which the limbs can be passively moved into any position, even the most unnatural, awkward, or constrained, and remain in this posture until the effect of fatigue causes them gradually to fall into one of rest. Or sometimes, if a movement be several times imposed upon the arm or leg, if, for instance, they be swung, when hanging down, like a pendulum, that movement will be continued for some time. The pulse and respiration are, as a rule, un-

affected in catalepsy; the patients whilst in this condition appear more or less unconscious of their surroundings, and may be insensible to various forms of stimulation.

Somnambulism. — Another rare paroxysmal manifestation is somnambulism. First with regard to somnambulism in the ordinary meaning of the term, *i.e.* sleep-walking. Persons who suffer to a marked degree from sleep-walking, in whom it occurs frequently and not as a very occasional affair, in my experience generally present evidence of hysteria in other ways. But besides this well-known and mild form, a more severe variety of somnambulism which comes on in the waking state is occasionally seen.

Noctambulism and Somniatio. — Both these forms, distinguished by Joseph Franck as (1) noctambulism and (2) somniatio, present the characteristics that the patient in the normal waking state is unaware of all that has occurred during the period of somnambulism, and that the same actions, or series of actions, are gone through in every attack. In some cases more than one kind of attack occurs; then the actions peculiar to each form of attack remain limited to and only occur in that form.

Somnambulism may follow hysterical fits, or attacks of sleep, or be induced by hypnotism. In the majority of cases the patients are not in the full possession of their mental powers

during the attack; but the mental change may be exceedingly slight, so as only to be recognisable by their intimate friends. Such conditions show all gradations to the more highly-developed states of double-consciousness, in which the patient lives a dual existence, and the mental life is divided into two psychical states, carried on independently of each other. The mental acquirements, the moral character, the behaviour in the ordinary business of life and social relations are often entirely different in the two states. When in one state the patient has no knowledge of the events of the other: the second existence thus lies outside the ordinary psychical content and is foreign to it. It is well known that in some cases of epilepsy the patient passes into an automatic condition after the fits, the so-called "ambulatory automatism," of the events of which he has no remembrance when the ordinary mental state is regained. The "automatism" of hysterical somnambulism is said to be distinguished from that of epilepsy by the fact that if the hysterical patient is hypnotised, the somnambulistic or secondary state is revived, and with it the remembrance of the events that had occurred in previous attacks.

Other paroxysmal features are attacks of delirium, or of a wild delirious raving, most often in connection with or as a sequel to the fits, but which may occur independently;

and various motor disturbances, spasmodic movements of trunk or limbs, attacks of cough, of sneezing, of hiccough, and of pain, all of which it will be more convenient to consider later.

CHAPTER IV

NON-PAROXYSMAL SYMPTOMS

DISORDERS OF SENSATION

Sensory Disorders.—Of the non-paroxysmal or permanent symptoms of hysteria the sensory disorders are amongst the most frequent and important, and at the same time are valuable in diagnosis because the patient is for the most part unaware of their existence, so that they form an objective feature of the disease. The occurrence of anæsthesia especially has been long known, and was used as a diagnostic test by the witch-finders of the late middle ages. The sensory disorders affect the skin, mucous membranes, and special senses, and may take the form of deficient, excessive, or perverted sensation.

Anæsthesia.—Amongst the sensory disorders of hysteria anæsthesia is the most common. Its presence is, as said above, often unknown to the patient and must be sought for. In this examination, as in all others in hysterical subjects, the readiness of such patients to react to any suggestion must be carefully borne in mind,

and the examination conducted so as to avoid leading questions or the suggesting to the patient of the object of the inquiry. During the examinations the eyes are to be covered. Simple tests in ordinary use are sufficient, but all forms of sensation to touch, pain, heat, cold, and the muscular sense should be tested ; the latter includes the sense of position, and of movement ; *e.g.* test the patient's ability to state the position or degree of movement of a limb, to put the other limb in exactly the same position and to distinguish between different weights. The power of localising a touch should also be noted.

Hysterical anæsthesia, even when to all tests apparently quite profound, has the characteristic of causing little or no inconvenience to the patient ; the absence of accidental injuries, or disagreeable subjective sensations, or disability to perform ordinary actions thus constitutes a marked difference from profound anæsthesia due to organic disease. Further, Professor Janet has shown that in many cases there is actually some sensation, though it does not enter into the patient's consciousness, is not perceived by her. This can sometimes be demonstrated by the simple plan of asking the patient to say "yes" when a touch is felt, and "no" when it is not. She will often ingenuously say "no" every time the touch falls on an anæsthetic, and "yes" when it falls on a sensitive, area of skin. This test will not of course always succeed,

and is not by any means a universal characteristic of hysterical anæsthesia, but it is interesting as throwing light on the nature of the disability.

The most common form of anæsthesia in hysteria is a moderate but not absolute loss of sensation to touch, pain, and temperature. In more pronounced cases, still quite common, there is absolute loss of sensation in these respects. So far the anæsthesia is probably cutaneous, but when it is still more profound, and involves the deeper structures of the limbs, especially the joints, there is in addition loss of the muscular sense or sense of position. It may be mentioned in passing that as a rule a prick on such an anæsthetic limb does not bleed (Hysterical Ischæmia). It may also be added that sensation to the faradic current is sometimes lost in complete anæsthesia, but in some cases, where there is cutaneous anæsthesia to touch or pain, sensibility to faradism is preserved.

Dissociation of Sensation.—Dissociation of the different forms of sensation may occur; that is to say, the loss may affect one form of sensation only, in this case loss to pain only (analgesia) is most common, but tactile anæsthesia may be found with normal acuteness to pain, or there may be a peculiar dissociation, such as loss to sensations of pain and cold, whilst those of touch and heat are retained. In some cases the peculiar dissociation of sensation seen in

syringomyelia (loss to temperature and pain but not to touch) has been described.

Distribution of Anæsthesia.—With regard to the distribution of hysterical anæsthesia it may be—

1. General, affecting the entire cutaneous surface; this is uncommon, and when present is generally more profound on one side of the body than the other; or one kind of sensation, *e.g.* tactile, may be everywhere deficient, whilst other kinds may only be absent over particular parts.

2. Hemianæsthesia is the most common form, and far more commonly met with in hysteria than in organic disease. The hemianæsthesia affects the head, face, trunk, and limbs, and is generally sharply and accurately limited by the middle line of the body. See Fig. 3, where the darkly shaded areas indicate patches of hyperæsthesia. The sharp demarcation of the border of hysterical anæsthesia in all its forms is sometimes given as a distinction from the anæsthesia of organic disease, but is not invariable. With unilateral loss of sensibility, more or less profound, there is loss or defect of vision, smell, taste, and hearing on the same side.

It is often found, however, that the degree of anæsthesia is not quite uniform all over the affected side; it is less marked, or even absent, in certain parts, whilst generally preserving the hemilateral type. This hemianæsthesia is the most common and characteristic of hysterical

anæsthesias: it is more frequent on the left side.

3. In scattered areas irregularly distributed

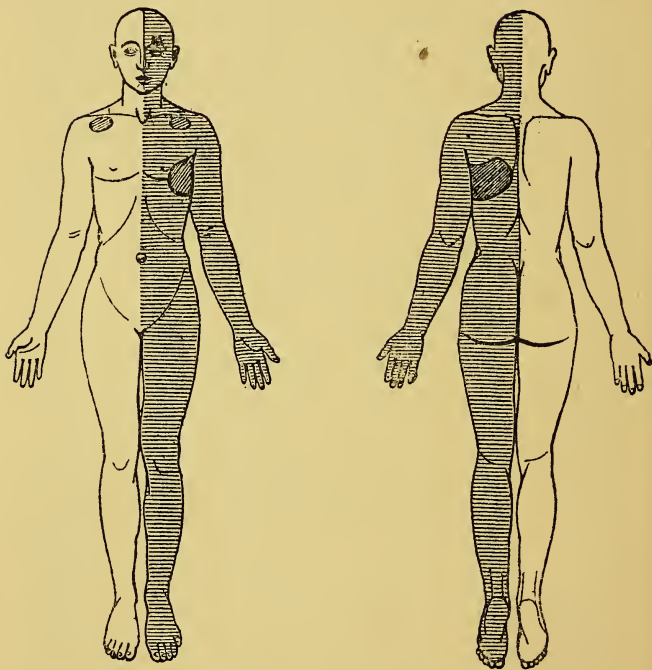


FIG. 3.—Hemianæsthesia of left side: deeply shaded patches were hyperæsthetic. From a patient who three months before suffered from hysterical paraplegia.

over the body, face, and limbs, as in the accompanying chart (Fig. 4).

4. "Segmental" or "geometrical" distribution. This form is met with on the limbs, and is most

often confined to one limb. The loss of sensation is limited to a limb, generally at the same time affected with hysterical paralysis or con-

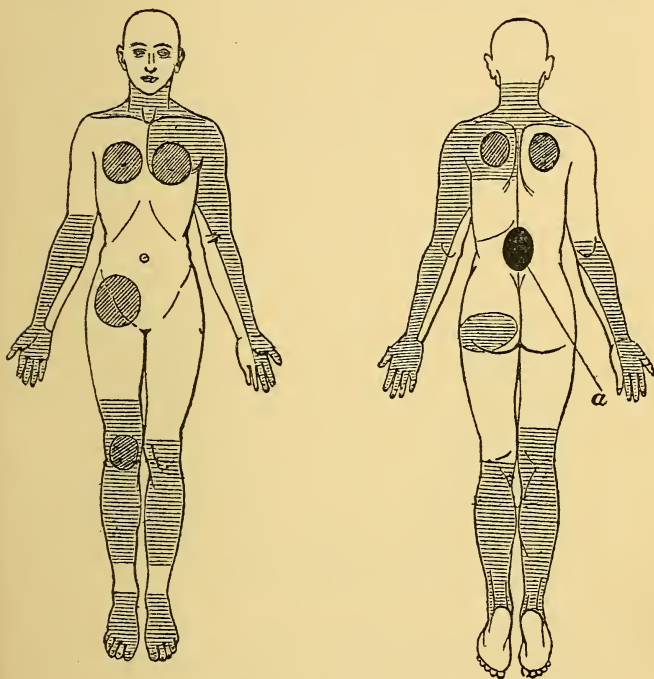


FIG. 4.—Darkly shaded areas indicate patches of hyperæsthesia, the lightly shaded anæsthetic areas. From a patient with hysterical fits and muscular weakness.

tracture, and is abruptly demarcated by a line passing round the limb at right angles to its long axis. Thus it may affect the hand and forearm only, or the leg and foot, in which examples the

anæsthesia has the distribution of a long glove, of a sock, or stocking. Professor Janet remarks that in such cases the distribution of the anæsthesia corresponds to the extent of the limbs as we commonly speak of them; *e.g.* to the leg, thigh, arm, or hand, in the popular use of the words, and not to their anatomical boundaries. The distal segments of a limb, though commonly,

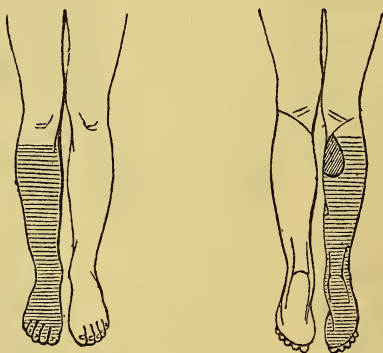


FIG. 5.—“Stocking” anæsthesia in paralysis (hysterical) of right leg. Plantar reflex absent.

are not necessarily affected, the proximal parts may be anæsthetic and the former escape.

Anæsthesia in Affections of Joints and of Special Senses.—It may be added that in hysterical affections of joints or of special sense organs, such as the eye, ear, &c., the skin over and immediately surrounding the joint, or in the case of the above organs, the eyelids, conjunctiva, auricle, and meatus, may be completely insensitive.

Without entering into details in this place it may be said that the relations between anæsthesia of the skin and affections of the special

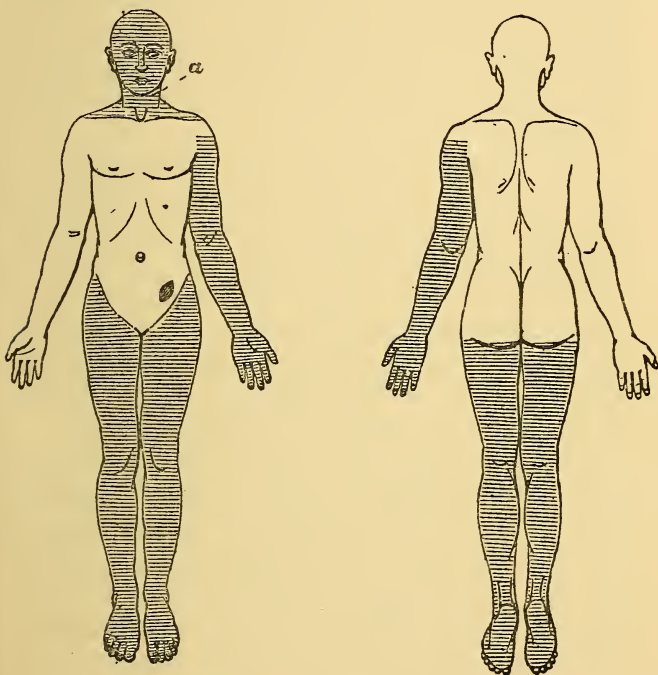


FIG. 6.—Extensive anæsthesia of “segmental type” from a case of hysterical paraplegia.

senses are, that, generally, when the anæsthesia is one-sided there is loss or defect of smell, taste, and hearing on that side, and anæsthesia of that conjunctiva, half of the mouth, and meatus

auditorius. Taste may, however, be lost over the whole tongue, and although special and common sensation in the nose and on the tongue are generally affected together, this is not always so, either may be preserved alone. Exceptionally these special senses may be lost or deficient on the opposite side to that of the cutaneous anæsthesia.

With regard to the eyes the conjunctiva is insensitive, as a rule, on the side of insensibility of the skin, very occasionally on the opposite, and sometimes on both sides. Both visual fields are contracted, the one on the anæsthetic side most, with occasional exceptions. It is rare for the insensitive conjunctiva and the most contracted visual field not to follow the rule, that is, to be in the same eye, and on the anæsthetic side.

When hemianæsthesia and other forms of hysterical anæsthesia do not involve the face the results as to the affection of special senses are more variable. The special senses may be also affected by themselves in one of the above ways apart from defects of cutaneous sensibility.

Hyperæsthesia—(1) *Pains*.—Spontaneous pains are frequently complained of in various parts of the body; especially in the head, where the fixed, boring pain called “clavus” is often described; in the breasts, back, abdomen, ovarian regions, joints, and limbs.

(2) *Tenderness*.—Patches of cutaneous tenderness, or increased sensitiveness to pressure,

are common, and, unlike the case of anæsthesia, the patients are generally aware of their presence. These areas of hyperalgesia are generally small, a few inches in diameter. The tenderness may be superficial, when even the light pressure of the clothes is painful, or may need deep pressure to bring it out. The commonest situations for them are the ovarian and infra-mammary regions—especially the former, constituting the symptom generally known as *ovarie*—and next the upper abdomen and vertebral spines.

Hysterogenic Zones.—In some patients irritation of such tender areas produces a feeling of faintness, or vague, uncomfortable sensations, and thus they form a transition to the so-called “hysterogenic zones,” irritation of which produces an hysterical fit. Such fit-evoking zones seem to be extremely rare in this country, and are not, therefore, of great practical importance. In one case, in a boy under my care, a convulsive attack could be evoked by stroking the skin of the hyperæsthetic abdomen.

Rarely cutaneous hyperæsthesia may be general, over the whole body, or over the whole anterior or posterior surface of the trunk.

Although in some cases hysterical sensory disturbances may persist during long periods unchanged, and sometimes constitute one of the most permanent of hysterical symptoms, this is not by any means always the case. On coming to examine a patient after a thorough

investigation of the cutaneous sensation on the previous day, it may be found that the anæsthesia then present has become modified, or even disappeared. Such sudden alterations, when they occur, form a valuable distinction from organic disease. Sometimes a hemianæsthesia may, as the result of previous investigation, of suggestion, or of the application of the faradic current or of a magnet to the affected side, be completely transferred to the opposite side of the body. This phenomenon is known as "transference."

CHAPTER V

PARALYSIS AND OTHER DISORDERS OF MOVEMENT

THE motor affections of hysteria are frequent and important, and comprise (1) paralysis, (2) contractures, or fixed muscular spasms, (3) tremors and rhythmical movements.

HYSTERICAL PARALYSIS.

1. *Paralysis*.—A certain degree of muscular feebleness, not amounting to actual paralysis, is very general in hysteria; frequently it affects all muscular actions and is somewhat vague and indefinite in character. It is, however, most common in the legs, and patients complain of all degrees of this weakness, from slight paresis to complete paraplegia. Definite paralysis is also often met with, and appears most commonly as the result of a fit, of some violent emotional or psychical disturbance, or of an injury. In the latter case the paralysis occasionally appears immediately, but more frequently after an interval of hours or days after the accident. So that there is a sort of period

of incubation, in which the patient sometimes goes over, in painful dreams, the details of the accident. It is not necessary for the traumatism to have caused severe bodily injury; a very slight accident may result in severe and obstinate paralysis. Sometimes, but not always, the limb injured is the one subsequently paralysed, as in one case of Charcot's, where a monoplegia of the leg resulted from a wheel passing over the limb, although the actual injury was trivial. In other cases the connection is not so clear, as in another example where a slight fall on the back produced inability to stand or walk.

In addition to the above causes, an illness attended with pains in the limbs or joints, such as acute rheumatism, may be followed, when all signs of the original disease have disappeared, by hysterical paralysis.

Certain forms of hysterical paralysis are again dependent upon "idea." The patient has a firm conviction that she cannot move the arm or leg. In a modified sense this is probably true of most forms of hysterical paralysis. Sometimes the idea may be an underlying one, form part of a secondary state, and not rise into the general consciousness.

Closely connected with the cases dependent upon "idea" are those instances in which the loss of power seems to be loss of volition. In another remarkable, though rare, group of cases the patient is not able to perform any

action without the aid of sight. Deprive her of the aid of vision, and she becomes paralysed. A movement begun with the eyes directed upon the limb, and perfectly carried out so long as they are so directed, is at once stopped when the aid of vision is withdrawn. In other examples the patient has been unable to move at all in the dark. In such cases Bastian has shown that there is a loss of the afferent impressions which constitute the muscular sense, which either do not reach the cortical centres concerned in the movement, or the latter are unable to utilise them in the normal way.

In a further group the paralysis does not affect a limb or limbs as a whole, but one particular co-ordinated muscular action is lost. It is, as it were, as if one special muscular mechanism was put out of action, as if one set of movements associated in the performance of a particular motor activity were suddenly dropped out of the patient's acquirements by a kind of amnesia. Thus the legs may be moved in every way but one particular way: the patient cannot walk, but can hop, skip, and jump.

In hysterical paralysis there are certain general characteristics. Patients affected with hysterical paralysis by no means always present themselves to the observer as obviously "hysterical"; they are often quiet, matter-of-fact, and unemotional. There is no wasting of muscles, as a rule; but in some cases, when the paralysis has lasted for

a long time, some general muscular wasting may occur. This, however, does not pick out particular muscles, nor is it ever attended by fibrillary tremor. This general muscular wasting is exceptional, and to be attributed to disuse. It should be mentioned that occasionally in old standing contractures a more pronounced and limited muscular atrophy is seen, confined to the contracted muscles. With these exceptions, the statement that muscular wasting is not a characteristic of hysterical paralysis is true. As a rule the electrical reactions are unchanged; in severe cases there may, however, be some diminution in response to both forms of current; there is never reaction of degeneration. The deep reflexes are never lost: in some cases they are exaggerated, but rarely to the extent met with in organic disease. Frequently the paralysis is not complete; there is some power of movement left, which is often anomalous in character. Generally there is some degree of anæsthesia accompanying the motor paralysis, the nature and distribution of which is of the character described above. To sum up: in a case of hysterical paralysis the associated phenomena which would occur in a like disability due to organic disease are not present. Lastly, the mode of disappearance may suggest the nature of the case; the paralysis may undergo some striking alteration, or may suddenly disappear, from an inadequate or trivial cause.

To take the special forms of hysterical paralyses according to their distribution, they may be— (1) Hemiplegic, (2) Paraplegic, or (3) Monoplegic. It is sufficient to mention those very rare cases in which the paralysis affects all four limbs at once; there would not often be difficulty in recognising their true nature.

(1) *Hysterical Hemiplegia*.—This may come on suddenly, or be gradual in onset. It is most common on the left side. An important characteristic is that the face and tongue almost always escape and are only paralysed in exceptional instances. Until late years it was said that the face always escaped, but it is occasionally, though very rarely, paralysed. In the only instance I have seen of this paralysis it affected the whole of one side of the face, on the same side as the paralysis of the limbs, including the orbicularis palpebrarum, and was not most marked in the lower part of the face, as is generally the case in organic hemiplegia. Apparent paralysis of the face and tongue may, however, occur from spasm of their muscles on the opposite side to the paralysed limbs, and diagnostic error from this source must be avoided. Hemiplegia thus affecting the arm and leg is generally accompanied by hemianæsthesia on the same side, which also involves the face, head, and special senses. The face may be thus concerned in the sensory and not in the motor affection. Hemianæsthesia is not of course present in all cases,

and is often partial in distribution. There may also be patches of hyperalgesia. The affected arm and leg may be flaccid, or one or both may be rigid; in the latter case the arm, as in organic disease, is in flexion and the leg in extension.

Gait.—If the patient is able to walk at all, the gait is peculiar; the affected foot is not brought forward, as in hemiplegia from an organic lesion, by a movement of circumduction in which the toes scrape the floor, but is dragged along the ground after the sound one—*i.e.* a step is made with the sound leg, and the other dragged helplessly after it.¹

Reflexes.—The abdominal and cremasteric are often absent; the plantar is also often absent on the paralysed side, when present it is always of the flexor type. The knee-jerk is often exaggerated; a kind of ankle-clonus is sometimes obtained, the jerks not being so regular nor so long continued as in the true form. The hemiplegia may be accompanied by affection of speech, but this will be considered below.

(2) *Paraplegia.*—Paraplegia is common in hysteria. Two chief forms may be distinguished—(a) in which the paralysis is flaccid in type, and (b) in which it is attended by rigidity of the muscles.

In the first form the muscles are flabby and uncontracted; if the paralysis is complete, when the patient is taken out of bed she falls on the

¹ For a further sign see p. 135.

floor ; if not quite complete she may, when supported on each side, make a few shuffling steps in which the feet are pushed or dragged along the floor.

In the second form the muscles are rigid and contracted, the rigidity often requiring a very considerable display of force to overcome it. This rigidity often affects the muscles of the lower part of the trunk as well as the legs ; the abdominal muscles and those of the lumbar region may then be as hard as a board, and the patient when lying down can be lifted up by her heels "all in one piece," so that she rests on her shoulders and head, and the legs and trunk form a rigid mass. The rigidity is present in all positions of the limb, and thus does not correspond to the "clasp-knife" rigidity of organic disease, in which the extensor spasm gives way rather suddenly and rigidity is less in flexion. The spasm affects the flexors also ; it can be overcome by firm pressure, and the muscles appear well nourished and firm. Not infrequent is a rigid, persistent contracture of the great toes in a position of extension. (See Fig. 7.)

The paralysis is frequently, but not always, accompanied by affections of sensation. In its most typical form this consists of anæsthesia to all forms of sensation, more or less profound, over both lower extremities, the anæsthesia ending very regularly at the groins in front, and the level of the gluteal folds behind. In my

experience affections of sensation are more often, and not infrequently, absent in cases of the spastic type. In profound anæsthesia there is loss of the muscular sense. In hysterical paraplegia pain is generally complained of, and is most commonly situated over the lower part of the spine or sacrum, sometimes at various points over the legs.

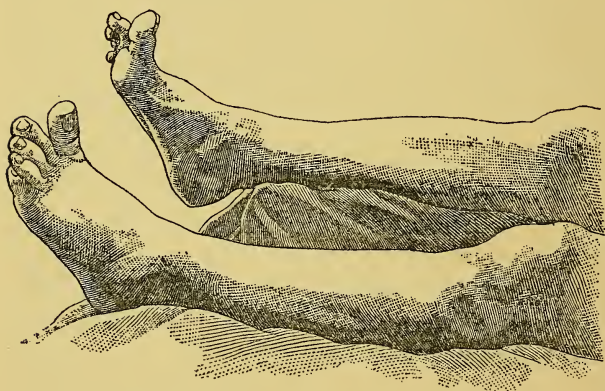


FIG. 7.—Persistent contracture of the great toes.

When the patients have been in bed for some time the feet, either dropped from paralysis of the extensors (dorsi-flexors), or extended from spasm of the calf muscles, may become fixed in the position of extension by adhesions, which then require to be forcibly broken down.

Retention of urine is common, especially at the beginning of the illness; incontinence is

extremely rare, although well-authenticated cases are on record. Beyond constipation, defæcation takes place normally.

Reflexes.—The knee-jerks are active or exaggerated, never lost, though when there is extreme muscular rigidity it may be difficult to elicit them. In these cases of paraplegia ankle-clonus is occasionally so marked as to be difficult to distinguish from that due to lateral sclerosis, but this is uncommon; more frequently it is of brief duration, consisting of three or four movements of the foot. The plantar reflexes are often absent; when present they are of the flexor type; there is never an extensor response either of the great or the other toes.

The legs or feet may appear somewhat swollen, blue and cold (*œdème bleu* of hysteria; Charcot). Bed-sores are not seen.

Twitchings of the muscles are occasionally complained of, but are not common. The patients frequently complain of pains in the joints, especially on movement, and it should perhaps be mentioned that in some cases pain in the back or limbs is given as the cause of loss of power.

Astasie Abasie.—To these more common forms of hysterical paraplegia should be added that variety mentioned above, in which the loss is of one particular movement, very often of walking. Such a loss of one action is more frequently met with in the lower than in the upper

extremities, although there may be loss of some one special movement of the hand or arm.

A patient with this form of paralysis may be able to move the legs freely into any position when lying in bed, or even when sitting, but cannot stand or cannot walk. In the same way some patients can hop but cannot walk, or may be able to walk but cannot run. In one instance the patient could not stand if he kept still, but if he constantly shifted his weight from one foot to the other, he could maintain the upright position. There are numerous variations, but the essential feature is the loss of one or possibly more than one of the complex co-ordinated acts of locomotion and not of others. Just as under ordinary circumstances a man can leap or dance, but may never have learned to swim, so here some co-ordinated action already acquired, is forgotten, or lost for a time. In some of these cases other signs of hysteria are present, but in many the symptom is an isolated one, and unaccompanied by affection of sensation or of the special senses.

(c) *Monoplegia*.—Paralysis of one limb, or of a part of it—*e.g.* the forearm and hand or the leg below the knee—is occasionally met with, more frequently as the result of an injury, slight or severe, or sometimes of the treatment of an injury by immobilisation in a splint. The paralysis may be of the flaccid type, or attended with spasmodic contraction of the muscles. In

such cases there is generally anæsthesia of the affected limb, segmentary in distribution, and corresponding in extent more or less closely to the range of the paralysis. There may also be patches of hyperalgesia, and the limb is sometimes the seat of neuralgic pains or of œdema.

In addition to the above, the more common affections of sensation in hysterical monoplegias, it may be worth while to point out that as in hemiplegia, so in para- and monoplegia a cutaneous hemianæsthesia may be present. This hemianæsthesia may coexist with loss of sensation over the paralysed limbs, or be the only defect of sensation noted. This correspondence in the accompanying sensory affection in different varieties of hysterical paralysis may perhaps be taken as an indication that the same region of the central nervous system is at fault in each case, and the occurrence of hemianæsthesia, either fully or incompletely developed, would further point to the cerebral cortex, in which all parts of the body are sensorially represented, as the part concerned.

With regard to muscular atrophy, great stress in the diagnosis of hysterical paralysis has been rightly laid on the absence of atrophy, alteration of electrical reactions, R.D., and fibrillary tremors in hysteria. This rule still holds good for the immense majority of cases; at the same time it must be added that there are now on record

well-authenticated cases in which the hysterical nature of the symptoms appeared to be unequivocal, but, at the same time, atrophy and loss of electrical reactions or R.D. were present. Should a case be met with in which such a condition was apparently present, it would be well to remember that the characters hitherto found in cases of muscular atrophy in hysteria are its remarkably sudden onset and rapid development to a high degree of wasting, sometimes, but less constantly, the almost equally rapid improvement, and the fact that it exclusively affects parts which are already the seat of hysterical paralysis, contracture, or anæsthesia.

CONTRACTURES, TREMORS, AND RHYTHMICAL SPASMS

Contractures.—Hysterical contractures form a very important group of cases, and often present a diagnostic problem of great difficulty. In dealing with paralysis, mention has been made of the spastic rigidity of the muscles which may accompany it, in still other cases the rigid contraction of the muscles is the prominent clinical feature, and, together with a varying amount of weakness, is the cause of the interference with movement. These contractures may come on suddenly or be gradually established, and own the same causes as paralysis.



FIG. 8. HYSTERICAL CONTRACTURE OF HAND

A history of an injury is common. The contracture affects all the muscles, flexors and extensors, but predominating in one group throws the limb into the particular posture present. Speaking generally the flexor muscles predominate and the limbs are flexed at the affected joints. In the upper limb the arm is adducted, the elbow and wrist flexed and the fingers closed so as to form a fist, or the hand may be fixed in the position of holding a pen. In the lower limb flexion, which may be extreme, of the knee or hip is most usual, but sometimes the joints are fixed in the position of extension. Contractures here are frequently limited to the foot—hysterical club-foot—in which it is fixed in the position of equino-varus. Fixed over-extension of the great toes is a common and characteristic condition, either existing alone, or associated with paraplegia. Sometimes all the toes stand up almost perpendicularly to the dorsum of the foot. In another form affecting the lower limb, the ilio-psoas may be contracted, and the thigh persistently flexed on the pelvis.

In a mild case of contracture the spasm may disappear during sleep, but in any well-marked example of the affection it is persistent, and cannot be overcome even by the use of much force, whilst the attempt to overcome it causes considerable pain. The contracture is relaxed, however, under an anæsthetic. In more severe cases of long standing the contracture may be so

extreme in the hand that the nails may be driven into the palm, and the skin of the latter ulcerated. In the annexed figure from a middle-aged woman this had occurred, and the contraction had lasted two years.

Segmentary anæsthesia may be present over the contracted limb, or there may be hemianæsthesia,

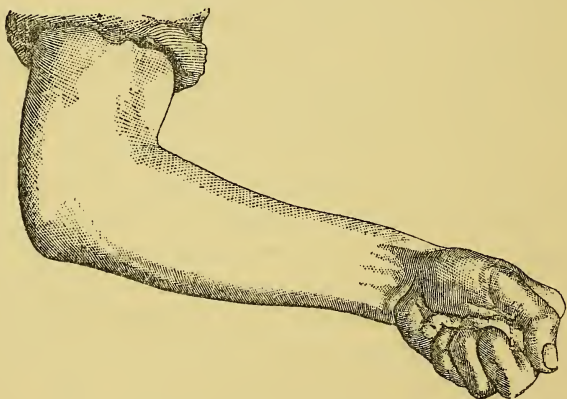


FIG. 9.—Contracture of hand and forearm.

or on the other hand the limb may be hyperalgesic. In the latter case there is great tenderness of the contracted part, especially on any attempt at passive movement. Very often in these cases, however, and especially when they are of long standing, no sensory affection can be made out. In some of them there is reason to suppose that sensory disorders have been present at an earlier stage but have subsequently passed off.

Some cases are attended with attacks of spontaneous pain. Frequently muscular spasm is associated with, or rather follows, pain in a joint (hysterical arthralgia). The muscles may in a case of some duration show some wasting; the electrical reactions are normal, and the tendon-reflexes unaffected, except in so far as contraction of the muscles prevents them. The affected limb may be blue and cold. Hysterical contractures are apt to persist a very long time, and after cure to reappear on slight provocation.

The above applies to contractions affecting single joints; as has been said, these forms vary very greatly in severity and in duration.

Multiple Contractures.—There is also a more severe form affecting more than one joint or limb, which has been especially described by Weir-Mitchell.¹

A good example of this form was under the care of my colleague, Mr. Morton,² and the condition is well represented in the frontispiece. The patient was a girl aged nineteen. The contractures had lasted three years; they began in the left hip, and spread to both knees and the right hip. The state on admission was as follows: "Marked flexion of both hips, obscured by lordosis, and thus not represented in the figure. Extreme

¹ "Clinical Lessons on Nervous Diseases," 1897 (chaps. xvi. and xvii.).

² *Bristol Med. Chi. Journal*, 1897, p. 31.

adduction of both thighs, with internal rotation. The internal rotation of the right was so great that the trochanter lay in a vertical line with the anterior superior spine. The left knee was flexed to a right angle, and the right was much more flexed. Both hips and knees were absolutely fixed, and any attempt to move them gave rise to expressions of great pain. The muscles of the limbs, especially the left, were greatly atrophied." The ligaments of the hip- and knee-joints were greatly relaxed. Under treatment, which consisted in breaking down adhesions under an anæsthetic, retention of the limbs, at first by splints, in a natural position, massage, and passive movements, she recovered in three months.

According to Weir-Mitchell the reflexes may disappear in old-standing cases of this kind, and the muscles show diminished response to the faradic, and after years even to the galvanic, currents. The muscles harden, and "about the joints and between the tendons a similar but far greater leathern-like hardening is found." The spasm may not relax even under ether or chloroform, and is not affected by sleep. He considers the "brawn-like" hardness of the muscles peculiar to this form of multiple contractures, and also states that changes in the joints occur, after years of contraction, which may be incapable of cure. The knee-joints are most apt to be affected.

Lastly, in the milder forms of hysterical contracture, and in those which affect one joint



FIG. 10. HYSTERICAL CONTRACTURE CAUSING FLEXION OF UPPER PART OF TRUNK TO THE RIGHT

only, recovery may take place suddenly as in other hysterical manifestations ; but in the severe forms of long standing, and especially in those which affect several joints, an abrupt recovery is impossible, on account of the adhesions which form about the fasciæ and tendons, and sometimes in the joints themselves.

Special forms are contractions of the muscles of mastication, causing trismus ; of those of the neck, causing torticollis ; of the muscles of the spine, producing deviation to one side or kyphosis ; spasm of one side of the tongue ; and blepharospasm.¹

Hemispasm of the face and tongue is important because of its frequent association with hemiplegia. The naso-labial furrow on the affected side is deepened, the angle of the mouth drawn to that side, the eyebrow lowered, whilst there are generally tremors of the muscles. In attempts at movement these features are exaggerated. The tongue is protruded to the same side, or efforts to protrude it merely result in its being thrust into the cheek.

HYSTERICAL TREMORS, RHYTHMICAL CLONIC SPASMS, AND CHOREA.

Hysterical Tremors.—Tremor is not seldom met with in hysteria. The chief forms are :—

1. A fine, rapid tremor, like that present in

¹ See "Affections of Eyes," p. 73.

alcoholism or in Graves' disease; it persists during rest and is little altered by movement, and in distribution is general. This is perhaps the form most frequently seen.

2. A tremor not so rapid as the former, and coarser. This may affect both the arms and legs, or the arms or legs only (paraplegic form).

This form varies in the degree in which it is present during rest and is affected by voluntary movement. There are two varieties, (*a*) in which the tremor is not increased on movement; (*b*) in which it is very markedly so increased. In the latter there is a resemblance to the tremor of disseminate sclerosis; but, so far as my experience goes, it is distinguished from this disease by continuing (1) during rest, and (2) after the object of any voluntary movement has been achieved.

In the paraplegic form the act of standing may so increase the tremor that the patient falls if not supported.

3. In a third variety the tremor is rather slower than in the first form, persists during rest, and is generally limited to the hand and forearm, the fine movements of which, and of the thumb and fingers, may closely resemble paralysis agitans. It is generally present only in one limb, and is not modified by movement. An accompanying spasm may keep the hand in the attitude of writing.

Rhythmical Clonic Spasms.—These are of very



FIG. II. HYSTERICAL "BOWING" MOVEMENTS IN A BOY. THE LAD PLACED HIS HANDS ON HIS STOMACH, AND THEN SUDDENLY BENT THE UPPER PART OF HIS BODY FORWARDS. THE PHOTOGRAPHER HAS BY A MISTAKE REPRESENTED HIM LEANING AGAINST A CHAIR

(From a photograph given me by Dr. Theodore Fisher)

various character, from an elaborate co-ordinated movement to the simple alternating contraction of the flexors and extensors of a joint. The more elaborate varieties consist of constant repetition of such movements as bowing (salutation spasm), or of a series of movements in which the patient leaps or bounds off the ground (saltatory spasms, or chorea saltatoria).

Other simpler movements are very often (1) *hemiplegic* in character; thus flexion of the forearm, followed by that of the fingers, is succeeded by extension of the forearm, and these actions alternate regularly with flexion and extension at the knee or ankle. Or (2) *monoplegic*, affecting the whole or part of a limb. Alternating rhythmical movements of the wrists and fingers, as if the patient were playing an imaginary piano, are common in this form.

These movements often appear first after a fit, or after some traumatism or emotion; they come and go with great suddenness, and are sometimes accompanied by hemianæsthesia, or some other form of sensory disturbance. They may stop when the patient's attention is diverted, and are chiefly seen in children and young adults. These points are useful in diagnosis, as is the fact that as a rule in a particular patient the same movement is repeated with great regularity and exactness.

Hysterical Chorea.—This is a rarer affection than the foregoing. The movements may affect

the body generally, or be hemiplegic in distribution. In one form they closely resemble those of chorea minor, but have a more purposeful appearance. When they affect the whole body they may be so severe as even to throw the patient out of bed. The diagnosis from chorea minor in such a case may be difficult, but is often aided by the presence of other movements with a distinct purpose, such as clutching or letting go of the dress, or by the presence of some sensory disturbance, and not infrequently of a contraction of part of one limb, as in the accompanying figure (Fig. 12), which represents the fixed contraction of the left leg and foot in a case of hysterical chorea in a girl of twenty-four. This limb was also completely anæsthetic.

In another form the muscular contractions exactly resemble those which follow isolated faradic shocks. They may be limited to a limb on one side, or occur irregularly in any part of the trunk or limbs. The spasms are often obscurely rhythmical in character, consisting of very rapid muscular contractions, two or three to the second, repeated for a series of ten to twelve shocks, and then followed by slower and stronger ones, with an intermission of some seconds before the next series. From the character of the spasms the name "electrical chorea" has been given to this form, but the term is unfortunate, as it is also given to another obscure



FIG. 12. CONTRACTURE OF LEFT FOOT IN A CASE OF HYSTERICAL CHOREA

and fatal disease which has nothing in common with hysteria.

In yet another variety the spasms resemble those of myoclonus multiplex. Thus a case of this affection in a lad presented the following features: When sitting in a chair he would suddenly be jerked out of it, his body being swayed backwards and forwards, and his arms agitated by strong muscular contractions. After a time he would suddenly spring back on to the chair. When in bed sudden contractions of the muscles occurred, by which his body was jerked from one side of the bed to the other, and his limbs thrown forcibly about.

In the last two classes of cases the character of the movements themselves is sufficient, combined as they generally are with other symptoms, to indicate the hysterical nature of the case, but in the form in which the movements correspond more closely to those of chorea minor the distinction may be difficult. The association of such movements, however, with other definite signs of hysteria, and in many cases the history, leave no doubt as to their real character. It may be added that the influence of treatment aids in diagnosis, such treatment as by shower baths, faradism, often rapidly curing an hysterical case when it could only aggravate one of ordinary chorea. The frequent origin of chorea minor from fright and other emotional disturbances—that is to say, from the same causes as produce

hysterical manifestations—makes it probable that chorea should occur in hysterical subjects, and the true nature of this particular group of cases of chorea, as distinguished from those of rheumatic origin, or from those occurring in patients with strong rheumatic antecedents, is a very interesting question. Possibly their relation to hysteria is closer than is generally held. At present, however much we may be inclined to draw an analogy between these cases of chorea due to purely emotional causes and hysteria, it is safer not to diagnose hysterical chorea unless there is present other decided evidence of hysteria, or, as in the first two varieties, the character of the movements distinctly separates them from chorea minor.

It should be added that all forms of hysterical tremor, rhythmical spasms, and choreiform movements cease during sound sleep.



FIG. 13. A CASE OF SO-CALLED "ELECTRICAL CHOREA"; THE HEAD, BODY, AND RIGHT ARM WERE THROWN INTO THE POSITION INDICATED IN THE FIGURE BY SUDDEN, SHOCK-LIKE MUSCULAR CONTRACTIONS, WHICH WERE SOMETIMES SO VIOLENT AS NEARLY TO THROW THE PATIENT OFF HER BALANCE

(From an instantaneous photograph by Dr. Newman Neild)

CHAPTER VI

DISORDERS OF THE SPECIAL SENSES

1. *Disorders of Vision.*—Disorders of vision are common in hysteria. The most characteristic alteration of vision is a concentric contraction of the visual fields. The contracted fields may be regular or irregular in outline. This contraction is present on both sides, but, as a rule, is much greater on one. It is generally present where there is cutaneous anæsthesia, and the contraction is then more pronounced on the hemianæsthetic side. When the contraction of the visual field is slight it may be confined to one eye, but I have not met with this in cases of marked contraction. The contraction may be moderate or extreme, as represented in the accompanying charts. The fields of vision for colours are often earliest affected—before those for form. The charts show that the fields for white may be smaller than those for red or blue; it is said that the normal relations in size of the colour fields may be reversed, red becoming the largest. In some cases loss of one part of the field may predominate. It is then the part towards the anæsthetic side of the body. This

contraction of the visual fields may occur, however, apart from any anæsthesia, in association with other hysterical symptoms, such as paralysis or contracture, and forms a valuable aid in diagnosis.

Except in extreme cases, acuteness of vision is

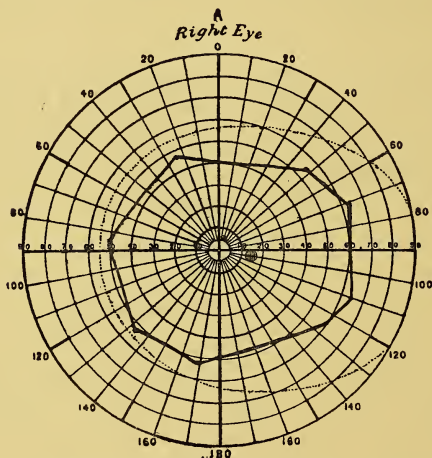


FIG. 14.—Moderate contraction of visual fields.
Fields for white only.

not affected, but when the contraction of the fields is very great there is also loss of visual acuity. As central vision is thus good in the great majority of cases, there is no complaint of defective sight. An explanation of the fact that hysterical patients do not appear to suffer from any disadvantage from the small size of the visual field is possibly that the feeble condition

of the visual centres renders them incapable of responding to more than a limited degree of stimulation at once. Thus if the eye be steadily fixed on an object, such as the fixation point of the perimeter, whilst the region of central vision remains acute, the outer parts of the

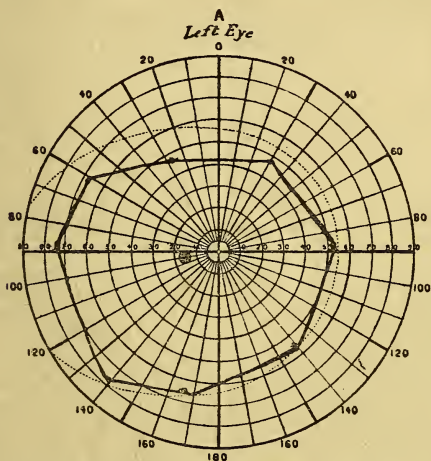


FIG. 15.—Moderate contraction of visual fields.
Fields for white only.

field are inactive. In ordinary vision for distant objects there is a certain degree of visual acuity over the whole field, because there is no necessity for concentrated attention on one point, and therefore the available power of vision is not exhausted as in looking intently at a near object. This view is borne out by the well-known fact that the examination of the visual

field in hysteria must not be too prolonged, for if it is unduly protracted a field may be obtained which progressively decreases with the length of

Right Eye.

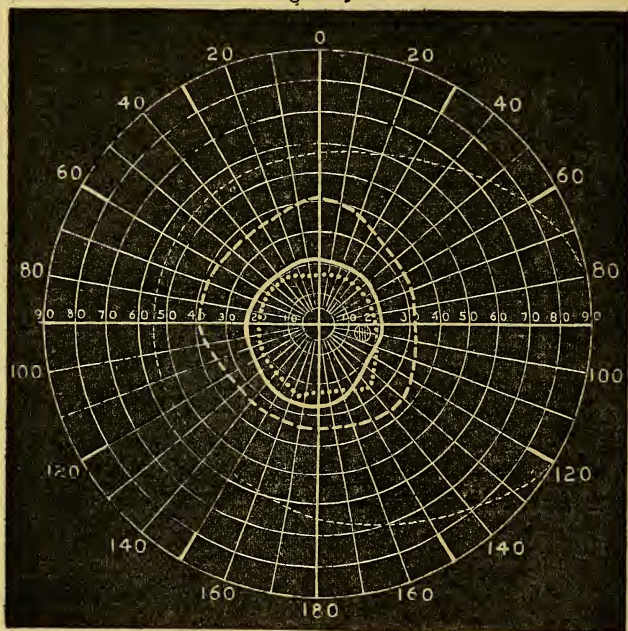


FIG. 16.—Extreme contraction of visual fields. Case of hysterical attacks. Disseminated areas of anæsthesia. Field for white, interrupted line ; field for red, continuous line ; field for green, dotted line.

the examination. The method of examination should therefore consist of a determination of the extent of the field along a few diameters only at a time.

Hysterical amblyopia is probably an extreme development of the above affection. Cases of complete blindness have been described, but are

Left Eye.

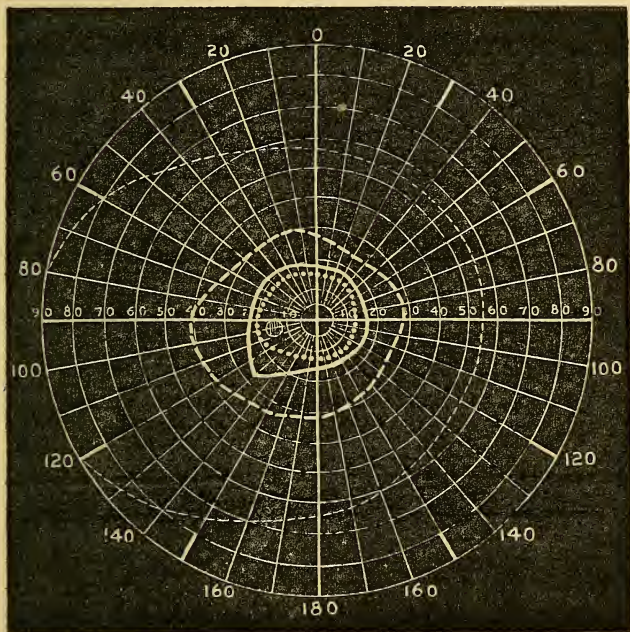


FIG. 17.—Extreme contraction of visual fields. Case of hysterical attacks. Disseminated areas of anæsthesia. Field for white, interrupted line; field for red, continuous line; field for green, dotted line.

rare; more commonly there is loss of vision in one eye. This unilateral blindness may come on suddenly after a fit, or a traumatism, or may develop gradually from a contracted field. It

is of very variable duration, and may clear up quite abruptly. Interesting experiments have been made by the aid of a prism, or of a modifi-

Right Eye.

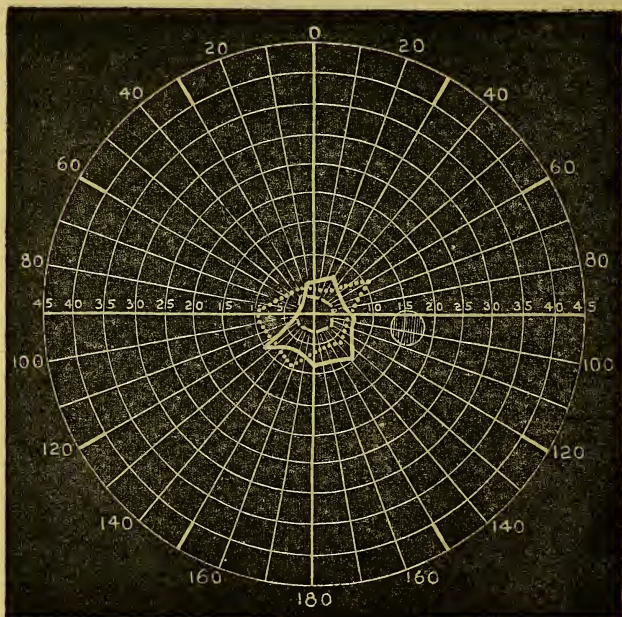


FIG. 18.—Extreme contraction of visual fields. Formerly hysterical paraplegia, now slight hysterical seizures. Field for white, interrupted line; field for red, continuous line; field for green, dotted line.

cation of the stereoscope, which prove that the patient does in reality see with the blind eye, though the images perceived do not rise into consciousness. This is analogous to the con-

dition which can be demonstrated in some cases of cutaneous anæsthesia, and has been described above.

Left Eye.

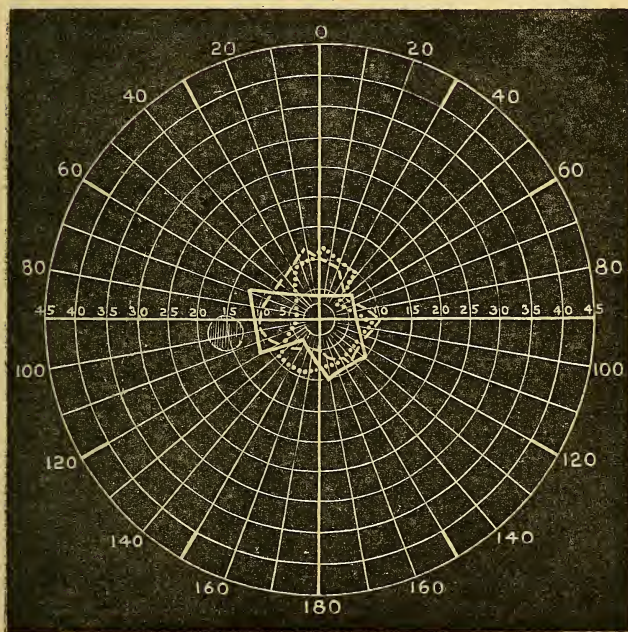


FIG. 19.—Extreme contraction of visual fields. Formerly hysterical paraplegia, now slight hysterical seizures. Field for white, interrupted line ; field for red, continuous line ; field for green, dotted line.

That these visual disturbances are of central origin is shown by the facts that they are susceptible to psychical influences ; they quickly come and go, and are amenable to suggestion ;

they may be transferred to the opposite side by the application of a magnet ; they may be occasionally removed by altogether inadequate means, such as putting a piece of plain glass before the eyes ; and, in spite of the great contraction of the visual fields, these patients have no difficulty in seeing their way about. These last conditions give a very close, but by no means true, resemblance to malingering.

The fundus oculi and optic disc are normal, and no changes appear in them even after these visual troubles have lasted for years.

Photophobia is common in hysteria, but not increased acuteness of vision, although this has been occasionally described. A curious hysterical phenomenon is monocular diplopia, or polyopia. In the latter the patient may see an object four or five fold. It is a symptom peculiar to hysteria, and has been attributed to irregular contractions of the ciliary muscle, or to irregularities in the lens. Another symptom occasionally present is that all objects appear too large or too small (macropsia and micropsia).

Affections of the Eyelids.—With regard to affections of the muscles of the eyes and eyelids in hysteria, these are generally due to spasm. Conjugate deviation of the eyeballs may occur during or after a fit, but is seldom of long duration and never permanent. Marked convergent strabismus is not infrequent in a fit. It is doubtful whether paralysis of an oculo-

motor muscle ever occurs. I have personally not met with an instance.

The most common motor affection is spasmodic contraction of the lids, which may take the form of either tonic or clonic spasm, and may affect one or both eyes. It sometimes occurs consecutively to slight conjunctivitis, or as the sequel to a fit, or there may be no assignable cause.

Clonic spasm, or nictitating spasm, producing a very rapid winking of the lids, often goes on during a fit, or is the precursor of one, and affects both eyes. It is also seen in some cases of trance. It is not generally of long duration.

Tonic Spasm of the Eyelid.—Tonic spasm of the eyelid is more permanent, and, though sometimes affecting both eyes, is perhaps more often one-sided. Gilles de la Tourette distinguishes (1) a painful and (2) a painless form. The former is generally bilateral, and there is hyperæsthesia of the conjunctiva, of the skin of the eyelid, and over a zone surrounding the orbit. In the latter the same parts are the seat of anæsthesia, and the affection is more often one-sided.

The pseudo-paralytic form, hysterical ptosis, which generally affects one eye only, is similarly due to a tonic spasm of the lid. Though the resemblance to true paralytic ptosis is often close, slight fibrillary contractions can generally be made out in the affected eyelid, and an attempt to raise it is strongly resisted by a spasmodic contraction of the muscle. A further distinc-

tion from paralytic ptosis has been given by Charcot, in that the eyebrow in the hysterical form lies at a lower level on the affected than on the sound side, whilst in true paralytic ptosis it lies higher on account of the compensatory associated over-action of the frontalis.

True nystagmus is not seen, though nystagmoid jerkings may be present as in other patients debilitated from various causes.

The pupils react to light and accommodation ; they vary in size, being most often large.

It has been mentioned above that contraction of the visual fields or amblyopia may occasionally be found as an isolated sign of hysteria on the sensory side, but that these visual symptoms more commonly occur in relation with cutaneous anæsthesia. With regard to taste and smell the same remark applies, except that it is still more rare to find these senses involved apart from any affection of common sensation.

Hysterical affections of taste and smell are almost invariably in the direction of lessened and not of increased acuity ; sometimes, however, patients complain of increased sensitiveness to smells.

Taste.—Taste, when affected, is often lost over the whole tongue ; sometimes, in association with hemianæsthesia, a more profound loss may be made out on the side of the tongue corresponding to the anæsthesia than on the opposite

side. The loss generally affects all forms of taste, but these may rarely be dissociated.

Loss of taste is generally accompanied by loss of common sensation over the tongue and mouth: in hemianæsthesia on one half of the buccal cavity only, that on the side of cutaneous anæsthesia. Tactile sensation may, however, be lost over the whole or one side of the tongue without any affection of taste: the reverse condition, *i.e.* loss of taste without some loss of common sensation in the mouth is very unusual.

The frequent impairment or loss of taste no doubt accounts for the liking of the hysterical for pungent or strange articles of diet.

Smell.—The commonest affection of smell is anosmia in one nostril, in association with hemianæsthesia and on the anæsthetic side; in such cases there is generally some loss of common sensation in the same nostril. Anosmia may occur, however, whilst common sensation in the nostril remains intact, perhaps more frequently than in the case of taste. The loss of smell may also be complete, affecting both nostrils. It is very rare as an isolated symptom. It is hardly necessary to add that in cases of suspected hysterical anosmia care must be taken to exclude local disease of the nose.

Of fifteen cases of hemianæsthesia in twelve there was loss of smell and common sensation in the corresponding nostril, and of taste and sensation on the same side of the tongue, and in two

loss of smell without loss of ordinary sensation in the affected nostril.

Hearing.—Tinnitus aurium occurs as part of the aura in many hysterical fits, but apart from this subjective noises in the ears are not a frequent cause of complaint, though there may be hallucinations of hearing, much more seldom, however, than of vision, as the sequel of a severe attack.

Hysterical deafness is most common as part of an hemianæsthesia with affection of the special senses; if the hemianæsthesia is profound the patient may be quite deaf on this side; there is then anæsthesia of the auditory meatus and tympanum, so that the latter can be touched without the patient's knowledge, and air blown into the middle ear by Pollitzer's method without its exciting any sensation. Where the anæsthesia is more general or disseminated on both sides of the body there may be bilateral deafness, generally in this case most pronounced on the side on which the anæsthesia is greatest. In milder cases there is partial deafness, and less complete loss of sensation over the tympanum and in the meatus on the affected side. Practically speaking, the degree of deafness bears a relation to the completeness of the anæsthesia, and as a rule deafness in hysteria is incomplete and unilateral. With regard to the tuning-fork test of bone-conduction the results show that hysterical deafness is nervous and central. In partial

deafness bone-conduction of the tuning-fork placed on the mastoid is lost first, when it can still be heard through the meatus and ossicles—placed on the forehead the sound is lost or diminished first on the affected side.

There are other cases in which deafness is not associated with anæsthesia, is complete, and comes on suddenly. The nature of these is doubtful. There may be also other anomalies of hearing, thus a whisper may be heard some way off when a watch close to the ear is not audible.

CHAPTER VII

DISORDERS OF RESPIRATION AND SPEECH

Dyspnœa.—Dyspnœa is not uncommon in hysteria. In some cases it is due to spasm of the glottis. This affection may occur in paroxysms, or in a more continuous form ; in the latter the vocal cords, instead of separating during inspiration, come together (functional inspiratory spasm), so that there is stridor during inspiration, and are only slightly separated during expiration. When, however, a careful laryngoscopic examination is made, the cords are occasionally seen to move well outwards during expiration, and this is a point of distinction from paralysis of the abductor muscles, due to organic disease, to which the symptoms afford a close resemblance.¹

Tachypnœa.—In other cases there appears to be simply increased rapidity of the respiratory movements ; there may be as many as 60 or 80, or even 160 respirations to the minute, and this may be maintained for some time. The pulse is not accelerated, the temperature is normal, and the rapidity of respiration contrasts

¹ "A System of Medicine," Clifford Allbutt, art. Diseases of Larynx, vol. iv., p. 848.

with the absence of distress, or of evidence of serious illness. The onset is generally sudden, and the condition may terminate equally suddenly.

These attacks are sometimes preceded by symptoms like those of an aura, and may end in an outburst of weeping.

In some cases the respiratory disturbance is determined by a trivial or slight bronchial catarrh, quite inadequate under ordinary circumstances to cause any increase of the respiratory rate.

Sometimes inspiratory spasm of the diaphragm is seen. At regular intervals there is a contraction of the diaphragm, which gives rise to a deep sob and is accompanied by slight associated movements of the mouth and nares. The spasms are painless. They cease during sleep. In one case they occurred regularly twenty-four times a minute, and lasted for four months; they ceased suddenly the day after admission into hospital.

Cough.—Hysterical cough may accompany dyspnoea, or be an isolated symptom. It is a loud, hard, noisy, rasping or hacking cough, occurring in children or young adults in constantly repeated paroxysms. There is no expectoration, nor any sign of disease in the lungs or larynx. The various noises produced are indescribable, but in any one patient the character of the "cough" is monotonously repeated. The so-called "cough" is sometimes an articulatory

noise made in the throat, harsh, rasping, or sawing in character.

Often the spasms consist of a long inspiration followed by a series of short noisy expirations. Other noises produced in the larynx resemble the cries of various animals; a barking sound is a frequent one. Epidemics of these noises may occur, as in the instance given by Gilles de la Tourette, in which the nuns in a convent took to miauling like cats, disturbing the neighbourhood.

Attacks of long-continued and violent yawning, sneezing, and hiccough occur in paroxysmal form. Charcot mentions a patient who yawned 7200 times in fifteen hours. Such attacks may end in an hysterical fit.

Aphonia.—This is a frequent phenomenon in hysterical cases, either appearing alone, or alternating with other hysterical symptoms. It may come on quite suddenly, or may supervene on a gradual loss of voice. The duration is very uncertain, hours, days, or months. Frequently it can be made to disappear for a time, by various measures—such as intra-laryngeal faradism—only to reappear a little later. Sometimes it follows on laryngeal catarrh, a very slight attack being sufficient to induce a consecutive aphonia; it is in these cases that the aphonia is gradually established. The patient speaks in a low whisper; but, whilst the voice is lost, it is often found that the cough, and occasionally the laugh, are

phonic, even though the loss of voice is of long duration. On laryngoscopic examination the appearance of the larynx is normal, but the vocal cords either remain divergent on attempted phonation, or more commonly are imperfectly approximated, so that an elliptical chink is left between them (paralysis or paresis of the adductors and tensors of the vocal cords). In other cases the inter-arytenoid muscles only are paralysed, then the cords are approximated in their anterior three-fourths on phonation, but a triangular chink is left posteriorly. Hysterical aphonia is far more common in women. A point of diagnostic importance is the insensitiveness of the fauces and of the larynx itself, rendering a laryngoscopic examination easy; in such cases the interior of the larynx may be touched with a probe and be found quite anæsthetic, or a laryngeal bougie passed through the vocal cords without giving rise to any discomfort.

Anæsthesia of the fauces, with loss of the pharyngeal reflex, is common in hysteria and of some diagnostic value, but this reflex may also be absent in other diseases and in the healthy.

Mutism.—Hysterical mutism is a rare affection, much more so than aphonia. In my experience it is relatively more common in men.

It comes on suddenly as a rule, owing the same causes as other hysterical disorders. In a typical case of mutism the patient is absolutely dumb, and is unable to utter a sound. In fact,

this is a distinction from motor aphasia due to an organic lesion, in which the patient is always able to utter a few words, such as "yes" or "no," or to make some ejaculation. At the same time hysterical mutism is distinguished from sensory aphasia by the power to hear and understand everything that is said.

In one class of cases, the most typical of the disorder, the patient is bright and alert and anxious to attract attention. He seeks to express himself by exuberant gestures, points to his throat and tongue to indicate that he cannot speak, and, armed with paper and a pencil, writes a voluminous account of his condition and sufferings.

This picture of mutism—absence of word-deafness, eagerness to find expression by gesture and writing—is a characteristic one.

There is sometimes anæsthesia over the throat (larynx) and chin, or less often hyperæsthesia. Not infrequently the loss of speech is accompanied by spasm of the masseters, so that the patient can only separate the teeth very slightly, by difficulty in swallowing, and inability to protrude or move the tongue.

In other cases the mutism is as absolute but the patient is quiet and listless, and shows a certain degree of mental hebetude. He indulges in no exuberance of gesture, and, though able to write and amenable to answer questions in this way, is by no means anxious to do so.

Mutism does not always occur, however, in these typical forms ; in some well-authenticated cases it has been accompanied by agraphia, and even with a certain degree of word-blindness. Word-deafness is also said to be a very occasional complication.

The recovery may be sudden, but is more commonly gradual ; at any rate, if the affection is of any duration, complete regain of speech may be preceded by a long or short period of stuttering, or the patient may be able to whistle or sing before he can manage to talk.

True aphasia, though very uncommon, is stated by some authors to occur in hysteria. It is of the motor variety. In one recorded case aphasia followed after mutism. In another there was motor aphasia with agraphia, but it is probable that, with a few rare exceptions, the cases described as hysterical aphasia belong in reality to mutism.

Hysterical stammering has been mentioned as a transitory phase in the recovery from mutism ; it may be added that it may be met with alone, especially in children after a fright or shock.

CHAPTER VIII

DISORDERS OF THE CIRCULATORY SYSTEM

THE affections of the circulatory system in hysteria are various, particularly those concerned with the vaso-motor system, as evidenced by disorders of the peripheral circulation in the skin, where such disorders are especially favourable for observation. From analogy it is often argued that other hysterical disorders, not so accessible to direct observation, may owe their cause to similar disturbances of the innervation of the vessels, and to consequent interference with the nutrition of the part.

Rapid Pulse.—The most frequent circulatory disturbance is palpitation, with a rapid pulse. Palpitation, and throbbings in the vessels, especially felt in the temporal arteries, have already been alluded to in connection with the aura of hysterical attacks. Apart from this, violent beating of the heart, with various feelings of bursting, præcordial oppression and the like are common enough, and are often accompanied by pain in the præcordial region, and sometimes tenderness. There may occur a persistently rapid pulse, lasting a considerable time; the diagnosis will

be aided by the absence of any other signs of circulatory embarrassment. The diagnosis has also to be made from the irregular (*formes frustes*) forms of Graves' disease, and in such cases other evidence of this disease must be carefully sought out. Mention may be made of excessive pulsation of the abdominal aorta, which is generally accompanied by dyspepsia, and the source of considerable discomfort and anxiety to the sufferers. This affection is by no means peculiar to hysteria, but is sometimes met with in it; the vessel can usually be plainly felt, as the abdominal wall in such cases is thin and lax, and the distinction from aneurysm is made by the absence of any enlargement of the aorta.

Slow Pulse.—Abnormal slowness of the pulse is not common, but occurs in hysterical trance or attacks of sleep, when the rate has been observed to fall so low as 45 or 50 to the minute, and the pulse-wave to be extremely small and feeble.¹ In the most marked cases of hysterical trance, in which the patient has sometimes been taken for dead, the pulse may be imperceptible at the wrist, and the heart-sounds extremely faint. The feebleness of the heart's action is an important factor in these extreme cases.

In no class of cases is it more difficult to draw the line of distinction between hysteria and neurasthenia than in the disorders of the heart met with in these affections, because they present

¹ See Löwenfeld, *Neurasthenie und Hysterie*, vol. ii. p. 422.

so many symptoms in common. If only those cases are considered as hysterical in which disturbances of cutaneous sensation or other undoubted hysterical troubles are concomitant with cardiac disorders, then the latter are not so often found in hysteria as in neurasthenia; but in cases in which such aids to diagnosis are not forthcoming no distinct boundary line can be drawn. It seems, therefore, better to consider only those cases of functional heart disorder as hysterical in which there is clear evidence of this neurosis in addition to the cardiac symptoms, although in so doing the risk is run of classing a few cases under neurasthenia which are really examples of mono-symptomatic hysteria.

Hysterical Angina.—Hysterical angina pectoris is not a very common affection, but is important to recognise. As in the case of other paroxysmal disorders, which often keep to the same form in one individual, so when this form of attack has once occurred, future paroxysmal manifestations tend to take this shape. The attack of hysterical angina begins with a feeling of faintness, oppression, bursting or actual sharp pain over the cardiac region. There is often a sense of suffocation, with pallor of the face, and coldness of the surface of the body. The pulse becomes very rapid, the respiration is nearly always affected at the same time, becoming rapid and shallow, the neck appears swollen, and the carotids throb. The patient constantly moans, groans, or may utter

loud cries or screams ; she snatches at her throat, presses her hands over her heart, or clutches hold of the attendant. She is generally restless, and tosses or throws herself about. The attack lasts a few minutes, and then passes off ; as it does so the face becomes flushed, the pulse falls in rapidity ; there may be a profuse sweat, and the attack ends in a sense of utter exhaustion or in a fit of sobbing or weeping. Often a quantity of pale urine is passed. The patient feels very ill, and may have a dread of impending death, especially in the first attacks ; afterward she becomes more or less accustomed to them.

The diagnosis in a case of this kind is rarely difficult. The moaning, screaming, and restlessness or tendency to move about are not seen in true angina pectoris, and some of the following signs are present.

In some cases hemianæsthesia is found on the left side. Hyperæsthesia over the left breast and præcordial region is sometimes very marked, so that the slightest touch is painful ; it is aggravated during and after an attack, and pains may radiate from this area down the left arm, which may also be hyperæsthetic. In the intervals a more or less persistent sense of muscular weakness, and of numbness in this limb, the latter sometimes amounting to anæsthesia, is a frequent cause of complaint. In some cases feelings of tingling, pins - and - needles, &c., begin in the fingers of the left hand, and passing up the arm

inaugurate an attack. The hyperæsthesia of the præcordial area is occasionally so pronounced that irritation of this region causes a distinct feeling of general discomfort and increased pulse-rate, and thus practically approaches to an hysterogenic zone.

If any difficulty in diagnosis as to the nature of the attacks is felt at first, it is generally removed by their subsequent frequency. Several may occur in the course of the day, and this may go on for months; or they may recur for years at longer intervals, *e.g.* once or twice a week or month. These anginoid attacks occur more frequently at night than other hysterical paroxysmal manifestations, and the patient may wake from sleep to find one coming on.

Hysterical Pseudo-Angina.—There is another kind of attack in which the symptoms are not so distinctly primarily of cardiac origin, but which belong more to the vaso-motor type of angina, and for which it is well to reserve the name pseudo-angina. In these the coldness of the surface preceding the attack itself is more marked; the face may appear ashen grey and bear an anxious expression. The tension in the vessels may be raised and the pulse-wave small; the heart's action feeble and its sounds very weak; the patient feels faint and lies quietly, or may sigh, be restless, and toss about.

With these symptoms there is complaint of præcordial pain, or pain "in the heart."

An increase of tension in the pulse is not, however, invariable ; the surface is generally flushed, especially the face, at the end of the attack. Hysterical disorders of sensation, either in the form of hyperæsthesia or anæsthesia can often be found, but are not such a prominent feature as in the first form of angina.

This kind of attack is with great probability to be regarded as not due primarily to the heart, but to a disturbance of the vaso-motor mechanism. As said above, there is generally evidence of a rise in tension and of underfilling of the peripheral arteries ; in the ordinary regulation of blood-pressure this goes with dilatation of the splanchnic vessels. It is hardly necessary to say that variations in the capacity of the vessels of the splanchnic area, which are under the direct control of the bulbar vaso-motor centre, form one of the chief factors in regulating the blood-pressure. Dilatation of these vessels brings about a rapid fall in the pressure of the systemic arteries, and at the same time causes a depletion of the intra-cranial vessels (cerebral anæmia) ; in this way an animal may, as has been said, be bled into its veins.

As will appear below, there is other evidence in hysteria of vaso-motor disturbance, and we know that the emotions may easily and profoundly affect the vaso-motor system. The mode of production of these attacks, and of those of hysterical syncope, may therefore be ascribed to a rapid

dilatation of the splanchnic vessels from causes insufficient to produce such an effect in the healthy.

The feebleness of the heart's action and the aspect of the patient may at first give rise to some anxiety as to the nature of the attacks, but their frequent recurrence and the absence of any evidence of heart-disease clears up the diagnosis, which cannot therefore always be made until the patient has been a little time under observation. Both forms of angina are generally, not always, relieved by nitrite of amyl and other remedies of this group.

This last form of attack passes by gradation in its varying manifestations in different cases to the attacks of hysterical faintness or syncope, which are sometimes met with. Some of these are produced in the way above given, but others are hysterical fits of the quieter or milder variety, in which the circulatory disturbance forms the predominant feature.

Lastly, hysterical disorders of the heart may complicate organic disease of that organ. Thus, a patient who has mitral-valve disease, as a sequel of chorea, may subsequently become the victim of hysteria; the results of treatment and careful observation of the case over a certain time generally enable the diagnostic problem of the separation of the hysterical features from those due to organic disease to be successfully solved. Perhaps the greatest difficulty of the

kind is met with in cases of aortic disease in young women who also present marked hysterical tendencies.

Hysterical Skin Affections.—To turn to the vaso-motor disorders of hysteria, these are shown in greatest variety in the cutaneous vascular system, and it will be convenient, therefore, to take in this place the affections of the skin which occur in hysteria.

The condition known as “ischæmia” has been already alluded to ; in this, part of a limb or a whole limb is pale, and the prick of a pin does not bleed. This ischæmic condition generally accompanies anæsthesia, but is sometimes seen apart from it.

Hysterical patients may frequently complain of flushings and morbid blushings, affecting the head and upper part of the chest, or the whole cutaneous surface may become suddenly flushed with blood. Small transient patches of congestion, which occur in parts of the skin usually pale, and are abrupt in outline, appearing and disappearing quite suddenly, have been described by Dr. T. D. Savill. They vary in size from a threepenny-piece to half-a-crown, and are said to be often seen on the skin below the ears, though they may occur on any part.

By the term *dermatographia* is meant the appearance of a slightly raised red streak on the skin in the track of the finger-nail, or of the point of a pencil, drawn across it. When well

pronounced the streak has a raised, pale, central line, and a further development leads to the production of a definite streak of urticaria—*factitious urticaria*. These phenomena are not peculiar to hysteria, but are frequently seen in hysterical patients.

Hysterical œdema, described fully by Sydenham, is occasionally met with. It is generally confined to one foot, hand, or limb, but may have a more extensive distribution. Unlike dropsy due to organic disease, it is said to be more marked in the morning. It is seldom an isolated symptom, but accompanies a paralysis, contracture, or painful affection of a joint (arthralgia). In some cases the skin over the swelling is normal in colour, smooth, and shining; in others it is cyanotic or even deep blue—the *blue œdema* of Charcot. The blue area is varied by scattered spots of red, is cold to the touch, and the œdema is hard and does not yield to pressure. This blue œdema is apt to be of long duration, weeks, months, or even several years.

In my experience the most marked examples have occurred in cases of contracture of a limb, and in a well-marked case the œdematous area ends abruptly by a steep edge, and the skin over it is anæsthetic, less often hyperæsthetic. In such instances the œdema follows a similar distribution to that of the “segmental” form of hysterical anæsthesia above described, occupying the area of

skin which would be covered by a boot, stocking, glove, or sleeve. Contrary to the usual description, I have several times found in cases of this kind deep pitting on pressure with the finger-tip. A flow of clear watery fluid exudes on pricking deeply with a pin, and in one case in which a few drops of the fluid were collected it contained the merest trace of proteid, and some sodium chloride. In this instance the œdema, which affected an anæsthetic and contractured foot and leg as high as the knee, entirely disappeared in twelve hours after pricking the leg in only three or four places.

This pronounced hysterical œdema may exactly resemble in actual appearance œdema due to any other cause ; the points in diagnosis are the peculiar distribution, and mode of ending by a sharp edge, and the association with other hysterical phenomena. The relation to angio-neurotic œdema (Quincke) is uncertain ; that affection is more limited in distribution, and in duration is frequently associated with colic, and occurs in families.

A *neurotic eczema* of special characters, as regards the eruption and its course and distribution, is described by Bettmann :¹ certain peculiarities in localisation, especially limitation to one side of the body, and an accompanying anæsthesia enable it to be recognised as hysterical.

¹ *Ueber die Hautaffectionen der Hysterischen. Deutsch. Zeitschr. f. Nervenheilk, B. 18, p. 245.*

Pemphigus and *gangrene* of the skin also occur, the former not seldom passing on into the latter. There is also a form of Raynaud's disease which is of hysterical origin. In such cases diagnosis is difficult from the trophic affections of syringo-myelia, and also from the ordinary form of Raynaud's disease. Bettmann lays stress on the following points in the diagnosis of hysterical skin affections—(1) the mode of origin, which is frequently in connection with hysterical paroxysms; (2) the accompanying symptoms, the skin affections often occurring on parts of the skin already the seat of sensory disturbance—as, for instance, unilateral erythema in hemianæsthesia; and (3) the localisation, which is sometimes suggestive of hysteria, *e.g.* a unilateral urticaria or erythema.

With regard to the cases in which hæmorrhages into the skin have been described in hysteria, and to the older descriptions in which such hæmorrhages occurred in the palms of the hands, the feet, and the side—the stigmata—it may be said that it is possible to regard such descriptions with too great scepticism. The results attained by hypnotic suggestion render such an occurrence at least possible, and some of the reported cases rest on good evidence.

In this connection mention may also be made of hæmorrhages from the mucous membranes, the nose, the ear, the throat, and of hæmatemesis and hæmoptysis, all of which

have been described. They generally occur in patients who are suffering from amenorrhœa, and are frequently regarded as vicarious of menstruation. It is obvious that the occurrence of severe hæmorrhages without organic lesion must be received in any particular case with great caution, and only after a searching investigation. Further, hysterical patients are often aware that "bringing up blood" is a symptom which will at once give concern to their relatives and evoke the desired sympathy and attention. In cases of supposed hæmoptysis that have come under my experience, the blood has been mixed with saliva, was not frothy, and did not present the characters of pulmonary hæmorrhage.

CHAPTER IX

HYSTERICAL AFFECTIONS OF THE ALIMEN- TARY AND GENITO-URINARY SYSTEMS— NUTRITION AND SECRETION — HYSTERI- CAL FEVER

DISORDERS OF THE DIGESTIVE SYSTEM

The Tongue.—Hemispasm of the tongue sometimes occurs in connection with contracture of the muscles of one side of the face. One half of the tongue is the seat of a tonic spasm which pushes the organ to the opposite side, and an attempt to protrude it may merely result in its being thrust into the opposite cheek. More rarely paralysis of the tongue occurs, the tongue lying motionless on the floor of the mouth ; such paralysis may be accompanied by tonic contraction of the muscles of mastication, and be the cause of difficulty in taking food, so that the patient can only swallow liquids.

Dysphagia.—Dysphagia from tonic spasm of the pharyngeal muscles of swallowing, and of the œsophagus, is not very uncommon. An attempt to swallow brings on a spasm by which the food is immediately rejected. Persistent cases of this kind may give rise to the sus-

picion of an organic stricture of the œsophagus, but the passage of a bougie will clear up the diagnosis and often cure the disorder. In some cases the capricious nature of the dysphagia at once gives a clue to its origin, the patient without apparent reason swallowing easily some foods and not others. Sometimes this affection is one of great severity and obstinacy, leading to malnutrition, and even, it is said, to death. Rapid clonic contractions of the pharyngeal muscles have been described in one case.

According to some authorities the very common symptom of globus is due to a spasmodic contracture of the œsophageal musculature rapidly ascending the tube and passing on to the pharyngeal muscles.

Another occasional cause of dysphagia is pain on swallowing; the patient feels an intense burning pain during the passage of food down a part or the whole of the œsophagus. The nutrition is not often interfered with, but the affection may be very intractable to treatment.

Passing on to stomach affections, attacks of severe pain in the stomach (gastralgia) on taking food, with retching, hiccough, and palpitation, occur in hysteria.

Hysterical vomiting is not uncommon; the exact cause of it is difficult to state. According to some authors the mucous membrane of the stomach is hyperæsthetic, or the seat of a hysterogenic zone.

In typical cases of this affection the food is vomited after every meal, soon after being taken, and apparently unchanged. The quantity vomited seems to be equal in amount to that swallowed. The vomiting is often preceded or attended by severe pain in the stomach, and there may be an area of cutaneous hyperæsthesia over the epigastrium. In other cases there is no pain, and vomiting does not occur until some time after food, but there is a feeling of distention or discomfort until the stomach is emptied. The vomiting may have continued for a long time, yet in spite of this history, the appearance of the patient may be healthy, and she may preserve her nutrition and a good colour. Her appearance is thus in contrast to the severity of the symptoms, and it is impossible to believe that at times, perhaps unknown to the friends, food is not taken and retained. There is, however, a definite loss of weight in many cases. As a rule isolation and firm treatment prevent any further trouble and result in the cessation of the vomiting. There are, however, more severe cases in which the nutrition is decidedly impaired, and unless prompt treatment is undertaken, the disorder may lead to a very grave, even a fatal, issue.

Hæmatemesis is also described in such cases ; in most the hæmorrhage consists of a little blood mixed with much watery saliva ; the origin is more generally from the throat or gums than from the stomach. Genuine large hæmatemeses can only be regarded as purely hysterical with

much scepticism when we remember the difficulty of diagnosing ulcer in some cases, and the now ascertained fact that copious hæmorrhage may result from a mere erosion of the gastric mucosa. It is safer not to diagnose or treat hæmatemesis as hysterical. One point may be useful in diagnosis ; I have not found in hysterical gastric disorders the tender area below and internal to the lower angle of the left scapula which is so frequently present in gastric ulcer.

Hysterical Ileus.—Symptoms of obstruction of the bowels with vomiting of fæcal matters occasionally occur in hysteria. For fuller information on the curious subject of hysterical fæcal vomiting I may refer the reader to the excellent paper by Dr. Parkes Weber.¹ He states that this affection, which is generally to be traced to one of the usual causes of hysterical disorders, begins with obstinate constipation, soon accompanied by abdominal pain, vomiting, and meteorism (*v.* p. 103). “The constipation becomes absolute and the other symptoms get worse, and finally the condition of ‘hysterical ileus’ is reached. Then everything taken by the mouth is returned. The vomiting becomes fæcal in character, and even pieces of formed fæces may be ejected by the mouth.” Instances are also recorded, especially by Gilles de la Tourette,² in

¹ “Fæcal Vomiting and Reversed Peristalsis in Functional Nervous (Cerebral) Disease.” *Brain*, 1904, p. 170.

² *Traité Clinique et Thérapeutique de l’Hystérie*. Paris, 1895, vol. ii.

which, apart from the possibility of deception, enemata were ejected by the mouth in twelve or fifteen minutes after their administration, and suppositories have been similarly returned. Such symptoms may continue for weeks or even months, with remissions. Other signs of hysteria, such as sensory disorders, will generally be found. The return by the mouth of fæces and enemata is shown by Dr. Weber to be probably due to a reversed peristaltic action of the bowels. Perhaps especial care is needed in this affection to guard against simulation. Patients who have suffered from the genuine disorder have sometimes been detected later in attempts at deception.

Perversions of taste and caprice as regards articles of diet are too well known to require more than a passing mention: the taste of the hysterical for pungent foods has been alluded to already, and may be connected with anæsthesia of the gastric mucous membrane.

Anorexia nervosa.—The affection known as anorexia nervosa, first described by Gull and Lasègue, is a very serious one. It is met with almost entirely in young women, and generally owns some psychic or emotional cause, such as a disappointment or contrariety, a desire to attract sympathy or some imagined neglect, a fear of growing fat, or a wish to reduce to a minimum the claims of the body as opposed to those of the spirit. It is better to look for the origin

of anorexia nervosa in some central (psychic) disturbance, and not to regard it, as has been done by some authors, as originating in an anæsthesia of the stomach, and consequent loss of the hunger sense. The absence of a feeling of hunger is not usually a primary symptom.

From one of the above causes, or a similar one, the patient begins to neglect the calls of appetite and to take very little food. It may be that all kinds of food are equally neglected ; but in many cases certain articles of food only can be swallowed, and then only when prepared in a special way. Thus one patient could only take a special kind of cake with the pieces cut into a particular shape.

In other cases the origin is quite different : the ingestion of food excites pain or feelings of fulness and discomfort, and, in order to avoid these, the meal-time is put off as long as possible, and less and less eaten at a time. During the earlier stages the patient generally shows a certain amount of excitement, or undertakes to do more than usual, is needlessly busy and energetic, as if to show her friends how much she can do on insufficient food. Soon after she begins to emaciate, to grow progressively weaker, sleep is disturbed and insufficient, she suffers from pains in various parts of the body, which are increased by movement, and from this cause and increasing weakness she takes to bed. At this stage frequently an effort

is made to take more food ; but if taken this now causes pain in the stomach or is immediately vomited, and so still less is eaten. Emaciation may now become profound, and if the patient first comes under observation at this time, is a striking feature of the case. In addition to the above symptoms there may be hyperæsthesia over the trunk or abdomen, or anæsthesia in various distribution. Unless energetic and skilful treatment is at once adopted, of which an essential part is removal of the patient from her surroundings, the disease may go on to a fatal issue, and it must always be regarded as a state fraught with danger. In severe cases there may be hallucinations or other signs of brain weakness, or even a condition of dementia. Judicious treatment, however, in a longer or shorter time leads to recovery of health.

Some of the stories of fasting girls belong to this affection, but it is impossible for an hysterical any more than for an ordinary person to go more than a certain length of time without any food at all. Such absolute abstention must be a rare occurrence, but a patient of Weir-Mitchell's went without food for twenty-seven days.

Other Abdominal Symptoms : Hysterical Peritonitis.—Passing on to other abdominal conditions, there is the so-called hysterical peritonitis. In this affection there is complaint of constant pain in the abdomen generally, or in some part of it, not infrequently accompanied by vomiting, and, if the disorder has gone on for some little time, by

emaciation. The bowels are obstinately constipated, the abdominal walls are rigid and retracted, the respiratory movements of the abdomen in consequence restricted, and there is superficial tenderness over it, often, in fact, a well-marked cutaneous hyperæsthesia. In other cases, instead of retraction there is abdominal distension with tympanites. The affection may be mistaken according to the acuteness and duration of the symptoms, in the one case for acute, in the other for tuberculous or other form of chronic peritonitis; but in the distinction from the former the wiry pulse and alteration of facies are absent, and the tenderness is superficial, and from the latter the absence of ascites, of localised collections of fluid and of solid masses aid in the diagnosis.

In hysteria violent flatulent eructations are common; these may occur in exaggerated form after food, or may have no connection with digestion.

Meteorism.—There is also hysterical tympanites or meteorism, in which the distension appears to be produced in some cases by swallowing of air. The abdomen may be greatly distended, so as to press upon the diaphragm and disturb the action of the heart and respiration. This distension may come on suddenly after a fit or some emotional disturbance, and last a variable time; generally of short duration, it may persist for a considerable period.

Some patients suffer from abdominal distension or swelling without any obvious accumulation of

gas. This may be general, but more commonly affects only a part of the abdomen, usually the hypogastric region. When there is amenorrhœa pregnancy may be simulated. Such local distensions, which are probably due partly to a tonic contraction of a portion of the muscles of the abdominal wall, and partly to a localised distension of segments of the gut, cause the condition known as "phantom tumour." If the patient's attention is distracted and firm pressure made upon the swelling it can sometimes be caused to disappear, at any rate for a short time ; but in any case where there is doubt as to the nature of an abdominal swelling, localised or general, occurring in an hysterical subject, the patient should be put fully under the influence of an anæsthetic, when, if hysterical, the tumour will disappear.

Another hysterical disorder, often very intractable, and persisting for long periods, consists of various pains, burning or cutting in character, in the intestines. These pains are sometimes aggravated by defæcation. In one form they are limited to the rectum, when they are increased after each action of the bowels, but persist to some extent in the intervals.

GENITO-URINARY AFFECTIONS

Perhaps the most common disorder is retention of urine, due to spasm of the sphincter vesicæ. It sometimes occurs alone, at others accompanies

paraplegia, or other hysterical manifestations. When a patient has once suffered from this symptom it is apt to recur, and especially so if the difficulty on the first occasion has been got over by using the catheter. It is therefore advisable to avoid using the catheter and secure emptying of the bladder by some other means, which can be done in most cases.

Irritability of the bladder of hysterical origin is sometimes met with ; the patient has a feeling of pain or discomfort in the region of the bladder, and may pass water as many as twenty or thirty times in the twenty-four hours. The quantity of urine in the twenty-four hours is not necessarily increased, and the affection must therefore be distinguished from polyuria.

Polyuria.—Hysterical polyuria, which is an occasional symptom, according to Mathieu occurs chiefly in men, and is accompanied by thirst, weakness, anæmia, and loss of appetite. From six to fourteen pints of urine may be passed in twenty-four hours. There is obviously very little to distinguish such cases from those of diabetes insipidus with pronounced nervous symptoms, but the hysterical form would be characterised by (1) coincidence with other hysterical phenomena ; (2) the mode of onset ; (3) sudden disappearance ; and (4) the influence of suggestion.

Polyuria occurs also as a transitory condition, and is, of course, well known in this form after a fit.

In the diagnosis of these urinary disturbances

the exclusion of organic disease requires even more careful investigation than in most forms of hysteria, and the same remark applies to the very curious condition of oliguria or anuria, the evidence for the existence of which is beyond question.

Anuria.—Of oliguria or anuria the most frequent form is a very deficient secretion of urine, amounting to a few ounces, for a short time, twenty-four to thirty-six hours, but more rarely such a condition may last for weeks or months. Instances of absolute anuria are on record. Charcot's case, in which no urine was passed for eleven days, is the most celebrated. In anuria and pronounced oliguria attacks of vomiting are often frequent and severe, and the vomited matter has been found to contain urea. There are also profuse sweats, and a minute quantity of urea may be thus excreted. It is remarkable in such severe cases that the derangement of the general health may be but slight; perhaps this is accounted for by the vomiting and profuse sweats, by the facts that little food is as a rule taken, and that metabolism is sluggish. Complete suppression of urine is also very exceptional. An analogous condition is found in cases of complete calculous obstruction of the ureters. The cause of hysterical anuria or oliguria is by some attributed to vaso-motor spasm of the renal vessels.

Hysterical Nephralgia.—A dull or aching pain

is complained of in the kidneys and along the course of the ureters. It is doubtful nowadays how far a true nephralgia exists apart from a moveable or floating kidney. The latter affection is so common in women, and is so frequently attended by various pains or uncomfortable sensations in the neurotic or hysterical that hysterical nephralgia may be generally ascribed to this cause. Often there is in addition greatly increased frequency of micturition.

Disorders of the Sexual Organs.—Disorders of these organs that can be unequivocally referred to hysteria are not very common. Amenorrhœa is frequent enough in hysterical girls and women, and other menstrual irregularities also occur. A common symptom, and one to which considerable importance has been attached as a sign of hysteria, is pain and tenderness or subjective painful sensations in the ovarian region (*ovarîe*). Tenderness in the corresponding region is also sometimes found in hysterical men. The ovarian origin of such pains in women is doubtful, but there seems no doubt that in some the ovary can be felt, and is tender. According to French observers, the hysterogenic zones which have been described above, are most frequent in this situation. Pains over the uterus, in the absence of recognisable disease of this organ, are sometimes described; and another hysterical affection is some sensory disturbance, generally anæsthesia, but occasionally hyperæsthesia, over the labiæ and in the vagina.

CHAPTER X

SECRETION AND NUTRITION

THE perversions of the urinary secretion have been considered ; another disorder of secretion is hyperidrosis, which is occasionally unilateral. Cases are recorded in which the sweat has been tinged with blood. Salivation, galactorrhœa and increased secretion from the uterus and vagina are also described.

With regard to nutrition, the general nutrition of hysterical subjects is often good, but it should be remembered that hysteria frequently occurs in persons who are anæmic, or thin and debilitated as the result of acute or chronic illness, or of over-work and insufficient food. It would obviously be wrong to attribute the nutritional defect in these cases to the hysterical manifestations ; and when the latter supervene in well-nourished subjects, their nutrition does not seem to suffer. They may remain in good condition, for instance, with a long-standing hysterical paralysis or contracture. The exceptions to this statement occur chiefly in hysterical gastro-intestinal disorders.

The researches of MM. Gilles de la Tourette

and Cathelineau¹ on a large number of patients bear out the above statements. They showed that in hysteria, apart from paroxysmal manifestations, the nutritive processes are normally carried on. During a fit or other paroxysmal manifestation, however, they found that the total solids of the urine, including urea and phosphates, are small in amount, and that in the following twenty-four hours the ratio of the earthy to the alkaline phosphates, instead of the normal 1 to 3, becomes 1 to 2, or even 2 to 1. Other observers, however, have found that this observation, although true of hysteria, is not absolutely peculiar to it, but is found in other affections of the nervous system.

Hysterical Fever.—As in the case of muscular atrophy, so, as regards fever, it may be said that in the vast majority of cases of hysteria there is no fever, taking fever in the sense only of a rise of temperature, and that its absence is often a valuable aid in an obscure case. A rise of temperature, however, whether directly due to hysteria itself or not, does undoubtedly occur occasionally in hysterical persons, accompanying undoubted hysterical manifestations, and, in saying this, it is of course understood that there is no evidence of any concomitant organic disease. The presence of fever after a series of convulsions can no longer be held to exclude

¹ *Traité Clinique et Thérapeutique de l'Hystérie*. Paris, 1891, vol. i. chap. xii.

their hysterical nature,—it was formerly given as a distinction from epilepsy, as in some cases of status epilepticus the temperature is raised,—for pyrexia has been found after repeated hysterical seizures.

Sarbo¹ divides cases of hysterical fever into (1) continued fever and (2) attacks of fever. The characteristics of the first form are—

(1) The temperature may reach above or below 101° F., and may be raised for weeks or months.

(2) The fever has no settled type, and runs no definite course ; it may suddenly come or go.

(3) The severity of the accompanying symptoms bears no relation to the fever.

(4) It presents various anomalies, such as a high morning and low evening temperature ; it may differ on the two sides of the body ; there may be local areas of redness of the skin, and elevation of temperature over them.

Difficulty of diagnosis is met with in certain cases in which fever is present, with such a grouping of other hysterical symptoms as to give them a resemblance to diseases ordinarily attended with fever. These are the cases of hysterical pseudo - meningitis, pseudo - typhoid, pseudo-tuberculosis, pseudo - peritonitis. (*Vide infra*, p. 131.)

In any case where pyrexia seems to be of hysterical origin great care should be taken to guard against fraud.

¹ *Ueber Hysterisches Fieber. Arch. f. Psych.*, vol. xxiii.

In the second form of "attacks of fever" very high temperatures have been recorded (109° , 110° , 112° , or even 118°). I have myself taken a temperature of 109° and 110° in the same patient, suffering from aggravated symptoms of hysteria with paralysis, and in which no assignable cause could be found for the pyrexia. The general symptoms in such a case are often slight, and bear no relation to the high temperature. Thus, in one case recently reported, a temperature of 112° occurred with a pulse of 90; and in this instance the thermometer was carefully tested, and held in position by the medical attendant himself. Hysterical delirium is a not infrequent accompaniment of such cases.

CHAPTER XI

HYSTERICAL JOINT AFFECTIONS

ARTHRALGIAS

THESE cases more frequently come under the observation of the surgeon than the physician. Hysterical affection of a joint is especially apt to occur alone as the sole sign of the disorder. These arthralgias thus constitute a considerable proportion of those cases known as "mono-symptomatic hysteria," in which the ordinary stigmata or signs of the disease are absent, and the diagnosis has to be made from the characters of the one symptom present, whatever that may be. Evidence derived from the family or personal history may be valuable. In the latter a distinct account of some past hysterical disorder is frequently to be obtained.

Joint affections, like other hysterical troubles, are more common in women. They own the same kind of cause, often, as compared with organic diseases of the same kind, quite disproportionate to the resulting disturbance, and there is the same want of uniformity in the symptoms present and the condition of the

general health. A large joint is generally affected; according to Charcot, the knee most frequently. Traumatism, often of quite a trivial nature, plays a specially important part. Sometimes excessive fatigue is the cause, and, according to Paget, imitation is at times a conspicuous factor in the case.

The first and most important symptom of an hysterical joint is pain; this pain is spontaneous, but the starting pains at night of organic disease are absent. There is also tenderness, generally at one or several spots, over or in the neighbourhood of the joint. Very often there is cutaneous hyperæsthesia over the joint, in the case of the knee and similar joints extending like a band round the limb. This hyperæsthesia is superficial, not involving the deeper structures.

The second symptom is rigidity, or spasmodic contraction of the muscles which move the affected joint; this may spread to all the muscles of the limb. The joint is thus sometimes fixed in the position of rest, as in organic disease, but sometimes, especially in cases of some duration or extensive spasm, may be in a forced or unnatural position. In the case of the hip-joint the limb is in adduction and flexion in the early stage, thus contrasting with organic hip disease. In the early stages of most cases, by diverting the patient's attention, the spasm can be avoided, and the joint moved into all positions by careful manipulation.

The third symptom is loss of power in the limb.

Temporary flushing or redness over the joint may occur during examination, but the joint or whole limb is often blue and cold, and in addition, the œdema described above may be present about the joint, and give it an appearance of enlargement. But signs of actual distension of the joint or alterations in the bone-surfaces are absent. Contractures may give rise to apparent, but there is no real, shortening of the limb.

In recent cases there is no muscular wasting. In those of old-standing there is often some general wasting of the muscles, which does not affect the same distribution, namely the extensors, as in organic joint-disease. The rigidity in these cases cannot be overcome by simple manipulation. Examination of the joint should be made under an anæsthetic, when the muscular spasm will be relaxed, except in old-standing cases, in some of which such an examination reveals the presence of adhesions in and about the joint, or of tense bands of fascia, and thickenings in the connective tissue, which must be broken down before the limb can be restored to a normal position, and be again capable of free movement.

According to Charcot, the order of reappearance of the symptoms during recovery from the anæsthetic is of diagnostic value—muscular rigidity returning first, and then pain. Severe

cases of arthralgia may last for months or years.

Hysterical Spine.—The spinal column is not unfrequently the seat of an hysterical affection. In this there is tenderness, often extreme, and brought out by the lightest touch, hence chiefly superficial, over the vertebral spines, and along the grooves on each side of them. This tenderness, and the pains which also occur, and are increased on movement, may lead the patient to take to bed, and avoid all movement. It is necessary to remember in the diagnosis from spinal caries that in many persons the dorsal vertebræ, from about the fourth to the tenth, are tender to percussion over their spines. There is no projection of spines as in caries. Muscular spasm or rigidity may be present, or the back may simply be weak and limp, in the former condition the rigidity is not the constant one seen in all positions in caries, but varies. A common form of rigidity is a muscular spasm producing a wide lateral deviation, by which the spine is bent to one or other side. Mention should also be made that in such cases there may be pain, and a zone of hyperæsthesia around the trunk—the pleuralgia of Briquet—simulating a true girdle-pain.

The “hysterical breast” is another disorder that comes chiefly under the surgeon’s notice. There is persistent pain and tenderness in one breast often attributed to a slight blow in that

region; the breast is tender, and the overlying skin hyperæsthetic. The skin is said to be sometimes red and discoloured, and the whole breast swollen, or small moveable swellings may be felt¹ (Ormerod), but, as a rule, examination detects no local cause for the symptoms.

¹ Allbutt's "System of Medicine," vol. viii., art. Hysteria.

CHAPTER XII

THE MENTAL STATE AND PATHOGENY OF HYSTERIA

Mental State.—A few remarks may be added to what has already been incidentally stated on the mental state in hysteria. The traditional account depicts the hysterical person as one of variable and unaccountable moods, unstable in character, given to violent emotions, and to lying, deceit, and dissimulation. That this is inaccurate as a general description, and based on a misconception of the disease, is not now disputed. The ordinary hysterical patient is not more given to deceit and lying than any other. If we look for a mental state in hysteria, characteristic of all patients, we shall be disappointed. There is no such pathognomonic mental condition, and hysterical patients vary greatly in their mental attitude and behaviour. As Lowenfeld¹ well says, it would be extraordinary if they did not do so; if all influences of education, position, and social status were in abeyance in a disease in which the patients are drawn from all classes, and live

¹ *Loc. cit.*

under very different circumstances. Further, the character of the physical symptoms present has an influence upon the psychical ones.

Many patients with hysterical symptoms are quiet, unemotional, and certainly not infrequently anxious to get well; others, with various hysterical disabilities, struggle bravely to fulfil their family and household duties, or to perform their work in life, and succeed in doing so for long periods without complaint.

Yet allowing for great variation in the mental habit of different patients, and taking due care not to be misled on the one hand by the signs of the hysterical character in a case of organic disease, or by the absence of them in one of some hysterical affection, it is true that in the majority of patients hysteria shows certain mental attributes and traits of character.

Loss of control or of regulation by the highest psychical centres is most important, showing itself in a strange variability of temper, in loss of control over the emotions, in a want of stability to carry out a definite purpose, in misplaced or misdirected and short-lived enthusiasms. In such patients everything is carried to an extreme. The emotional unrest is shown sometimes in the positive form, in unnatural excitement, sometimes in the negative, in equally unreasonable depression. There is also no doubt that in many patients there is a desire to attract sympathy, to appear "interesting," that their illness should

have some element of the unexpected. A love of the marvellous, a desire in a way to "stagger humanity," is a not uncommon feature.

Perhaps one symptom that especially strikes the medical observer is the lack of concern so frequently displayed at some apparently grave disability. An hysterical girl will betray little or no anxiety as to the future course of her illness when she is affected with paraplegia or hemiplegia, whilst a similar paralysis due to organic disease would cause the sufferer the greatest concern as to the prospect of recovery. This condition we may perhaps attribute to a general state of mental torpor in which little interest is taken either in the surroundings or in the personal welfare; this state of lack of proper interest is not uncommon, though not so frequent as the one in which absence of interest in the surroundings is the consequence of self-concentration.

From another point of view the hysterical patient is extremely sensitive to anything in her surroundings which bears directly or indirectly upon her own symptoms. This ready amenability to suggestion can be frequently observed; for instance, it is sometimes enough to suggest in a patient's hearing that such or such a symptom ought to be present, for it to appear the next day. This readiness to be influenced in various directions is no doubt one cause of the variations so often shown in the course of the disease, not only is the hysteric open to sugges-

tion from without, but also to those from within the body, to the so-called auto-suggestion. Thus the occurrence of some pain or disordered sensation may be the starting-point of a long-lasting hysterical affection.

Many writers have pointed out that in hysteria the memory is peculiarly defective, taking the form of amnesia, sometimes for long-past events in the life of the patient, sometimes for quite recent occurrences, as to what, for instance, she has said or done on the previous day, or part of the same day. In this way there may be gaps or lacunæ, even for considerable intervals of time, or for important events, in the past life, which are thus lost to the ordinary consciousness. Such a loss is, however, temporary and not permanent; often in the state of induced hypnosis, or again, when recovery has occurred, such gaps in the memory are made good. This amnesia, it has been said, is in part the source of the belief that hysterical persons are liars. If there is loss of memory for recent events, the patient may in good faith repeat what she believes she has said a short time before, or report some event which has never occurred, and in such case the speech or the report may bear no relation to what has really been said or has happened, and may too hastily be considered an intentional fabrication.

Such and similar departures from a normal mental state, or from a well-balanced character

are often observed in hysteria, without at the same time being constant features of the disease.

THE PATHOGENY OF HYSTERIA

Definition.—In dealing with the nature and origin of hysteria there is first the difficulty of framing a definition of the disease which shall be sufficiently comprehensive to comprise all the symptoms. Secondly, there is, speaking from the physician's point of view, the difficulty of finding a satisfactory explanation for a disease which presents so many striking symptoms, and for which, so far as our present knowledge goes, no vestige of an anatomical basis can be found. Both anatomico-pathological examination and chemical inquiry into metabolic changes are alike silent as to the underlying cause of the disease.

Many of the most characteristic features of hysteria are obviously psychical in origin, and this has led many observers to seek for a purely psychological explanation. The close resemblance of certain hysterical phenomena to those of the hypnotic state has afforded another argument, on the ground of analogy, for this view. Charcot first investigated and insisted upon the analogies between hysterical paralysis, especially in traumatic cases (see *infra*), and that induced by hypnotic suggestion.

Thus we have the view of Möbius, that hysterical symptoms are dependent upon "idea," which would make hysteria purely a psychosis; and the theory of Breuer and Freud, that they depend on certain so-called "hypnoid states," in which certain sets of sensations, motor or sensory, are cut off or separated from their normal associations. This theory presupposes a kind of double consciousness, the impressions which are the source of hysterical symptoms existing apart and uninfluenced by the normal consciousness.

Professor Janet has formulated a more elaborate theory, in which hysteria is still a psychosis or mental disorder, or, rather, consists of an aggregation of disorders dependent (1) on defective representation in the cerebral cortex; (2) on a condition of double consciousness, in which there is a "dissociation of ideas," presenting a close resemblance to the state of somnambulism; on this hypothesis long-persisting hysterical symptoms pass out of the ordinary conscious life of the patient; and (3) on a narrowing or restriction of the field or range of consciousness; whereby the permanent stigmata, which take the general form of suppression or enfeeblement of sensation, memory, or movement are accounted for.

Möbius agrees with Janet that the most striking symptoms of hysteria, especially anæsthesia, are psychical, and to be assigned to a division of consciousness, but disagrees with him in regard-

ing this division, and not the narrowing of the range of consciousness, as the primary and essential change. Further, he thinks that division of consciousness can only be regarded as hysterical if that part which drops out of the waking or normal consciousness is not entirely lost, but can be recovered under suitable conditions.

Interesting and suggestive, however, as these speculations are, the consideration of hysteria as purely ideo-genic or psychological in origin does not give a satisfactory explanation for many symptoms, and therefore cannot be held to completely cover the ground. There are hysterical phenomena which are better met by a physiological than a psychological explanation. Though in certain cases of hysteria a state of double or divided consciousness has been shown to exist, and in others may be present in a modified form, this is not usually capable of demonstration, and in the majority of patients such a condition cannot be made out except by straining the sense of the term. The hypothesis of a divided consciousness is difficult to deal with clearly without falling into obscurity, and is not sufficiently easily determined to be generally useful in clinical investigation.

Returning to the most striking features of hysteria, these are the frequent absence of power of initiation, the diminished power of attention, the way in which, as Oppenheim has pointed out, the emotions easily influence the motor,

vaso-motor, sensory, and secretory functions, and the ready amenability to suggestions in various ways and of different kinds ; to which may be added the easy susceptibility to the influence of certain impressions, and an equally unaccountable insusceptibility to others.

Amongst the many theories of hysteria some would attribute all its phenomena to disturbances in the vaso-motor system. But it is impossible to accept this hypothesis as sufficiently far-reaching, or to explain on a theory of vaso-motor spasm the long-lasting paralyses. It may also be legitimately asked, What produces and lies behind the vaso-motor disorders ? That vaso-motor disorders are frequent in hysteria we have already seen ; many conditions produced by them are directly accessible to observation. The sudden onset of certain symptoms, such as some forms of paralysis, may sometimes be explained by vaso-motor disorder, which provides a simple physiological explanation of the more immediate cause ; and it is further possible that a disorder of the circulation continued for a certain time might induce such an alteration in the nutritive state of a nerve-centre, that it would continue in the morbid state so induced even after the vaso-motor spasm had passed off, until a more than usually powerful stimulus again altered the conditions. Further than this, however, the vaso-motor theory does not help ; it is perhaps the

direct or immediate cause of some hysterical phenomena, and in this limited sense the explanation of them, but is a secondary condition, and not a primary feature of the disease.

It is most in consonance with all the evidence that we have from the phenomena of the disease, to look for the origin of hysteria in the highest cerebral centres, and to regard it as due primarily to a disturbance of the cortical grey matter. It seems more reasonable to suppose that its symptoms are due to disorder of function of the grey, rather than to defect of conduction through the more unimportant white matter. This disorder of function may show itself by diminished conduction along certain paths, or by the introduction of an unwonted resistance to the passage of impulses along accustomed tracts. So that impulses, motor or sensory, from the periphery to the centre, or *vice versâ*, or between centres normally closely associated, cannot pass, whilst other centres, not usually connected in health, may come into unwonted association. Hence may arise an interruption of the normal processes of association, both on the highest level (mind, memory, &c.), and on the lower level (motion, sensation, &c.), and by the lowering of resistance along other paths the emotions gain an unaccustomed ready access to the centres connected with the functions of organic life.

Further, the due subordination of centres in

the hierarchy of the nervous system is disturbed. Lower centres freed from the normal restraint of the higher, and unduly stimulated, enter upon an abnormal activity. The supposition that the primary disturbance is in the cortex cerebral grey matter, does not preclude us from assigning many hysterical features to a secondary disorder of lower centres in the brain, nor from holding that these may afterwards become the source of the dominant and most persistent symptoms of a case, especially in its later stages.

The cord is so pre-eminently the servant of the brain in man, that in the absence of proof to the contrary, it is more probable that functional disorders of the nervous system are primarily referable to the latter, and that the latter, if it plays any part in producing them, must take an entirely secondary place.

The characters of the anæsthesia, and of the paralysis and contractures in hysteria, can be and are best explained on the hypothesis of a cortical origin. As has been already pointed out, hysterical paralysis and anæsthesia have a distribution which corresponds to the mental ideas of the limbs or parts of the body, and neither show any reference to the nerve supply or to the spinal centres.

CHAPTER XIII

HYSTERIA IN CHILDREN AND IN MEN

HYSTERIA is not infrequent in children, and a few remarks on its main characteristics in them are necessary. Although cases have been described under the age of eighteen months, I have not been able for my own part to recognise it at so early an age. At three or four years it is occasionally seen, but its chief incidence falls from the age of eight onwards. With regard to sex, there is not the predominance in the female that is seen in adults. The sexes are about equally affected, perhaps there is a slight excess of girls. The influence of heredity is marked; careful inquiry generally shows the presence of the neurosis in one of the parents or in near relatives. This is only what is to be expected. The importance of heredity being now admitted in hysteria, the earlier in life the disorder appears the stronger should be its influence. Next to heredity in importance is alcoholism in the parents. Obviously the influence of a drunken parent would show itself in many other ways than by direct inheritance; the recurrent scenes of terror or the sordid misery of the drunkard's home

being particularly likely to affect a susceptible child. The influence of the home atmosphere in causation has been dwelt upon above ; it is further shown in the fact that an only child especially frequently comes under medical care for hysteria, both amongst rich and poor patients. The influence of imitation or unconscious mimicry in the etiology is often well exemplified in the case of children, and affords another example of the potent effect of their surroundings on the hysterically inclined. Thus a child with an epileptic relative may be brought up for hysterical convulsions, or one with a paralysed brother or sister may suddenly become affected with hemiplegia or paraplegia. The same influence is shown in the epidemics of hysterical manifestations, such as clonic spasms, or strange noises, which sometimes run through a school.

Traumatism may also be mentioned as playing a very prominent part in childhood in exciting an attack of hysteria ; thus a boy received a slight blow on the shoulder from a cane, and a few days later developed complete paralysis of that arm. With regard to overpressure or overwork at school, Charcot considered that this had a small share in the etiology of hysteria, and it is certain that parents are often anxious to impress on the medical attendant without sufficient reason that school work has been the origin of the trouble present ; but even allowing for this, the effects of school-life in producing hysteria in

a susceptible child appear undoubted, and may act first directly by overwork, secondly, by fear of corporal punishment, and lastly, through ill-treatment of a timid child by rough companions.

To the evil practice of masturbation some attach much importance in etiology, and no doubt special care should be taken with neurotic children to prevent the formation of this disastrous habit.

Hysterical children are apt to show certain departures from the normal long before a definite outbreak occurs. They are often precocious, and very demonstrative in affection, but at the same time fickle, volatile, difficult to manage or control, liable to outbreaks of violent passion, jealous of other children, spiteful, and capricious with regard to food. Though this is true of many, it must not blind us to the fact that pronounced hysterical manifestations may occur in a quiet, somewhat morose child.

These children sleep restlessly, and are much given to talking in their sleep. Often one of the first symptoms to appear is sleep-walking or somnambulism. Hysteria in children often takes the monosymptomatic form. Sensory disorders are not so frequent as in adults; pronounced anæsthesia and analgesia are decidedly rare. Hyperæsthesia is much more common, and not infrequently accompanies various forms of paralysis or spasm, and sometimes extends over the whole of the trunk and limbs. Attacks of local-

ised spasm of muscles of limbs, various rhythmical movements, and coarse tremors are often seen. Paralysis, more especially paraplegia, is not uncommon in the hysteria of childhood, either of the flaccid type or attended with spasm. That form of paralysis in which some special movement of the limbs is lost, whilst other movements can be well performed, the type of cases classed under the term *abasie-astasie*, is not infrequent; indeed, the loss of some special action of the upper or lower limbs forms a considerable proportion of cases of hysterical paralysis in children. Symptoms referable to some part of the respiratory system, such as rapid respiration, various noises accompanying inspiration or expiration, loud barking cough, sudden spasms of the diaphragm, or hiccough, are all frequently present in the hysteria of childhood. With regard to these functional affections of phonation and respiration and to some of the repeated movements mentioned above, it is doubtful whether they can be strictly called hysterical, or should not rather come under the head of the "simple tics" or "habit spasms." Joint affections occur occasionally, especially in the hip and spine; in these cases there may be anæsthesia. Lastly, children are occasionally seen in a state of trance, this state being usually accompanied by fits of some kind, but, speaking generally, hysterical fits are uncommon.

Hysterical pseudo-meningitis and pseudo-peri-

tonitis.—Passing mention may be made of two groups of cases, *first*, of those in which some of the following symptoms, namely, intense headache, photophobia, dulness or drowsiness, localised tenderness of the head, constipation, vomiting, and general weakness, with sometimes definite loss of power in a limb or limbs, may for a time make the diagnosis from commencing *meningitis* difficult; and, *secondly*, of those in which pains in the stomach, extreme hyperæsthesia over the abdomen, vomiting, anorexia and constipation, with loss of flesh, may suggest the beginning of *tuberculous peritonitis*, or when there is abdominal distension, even of *enteric fever*.

In both groups there may be exceptionally a transitory rise of temperature; the ease with which fever occurs in children, however, renders this a less important distinction than in adults. If hysteria is only thought of, even if the diagnosis cannot be made at once, a little careful watching of the case will soon enable the observer in cases of hysteria in children to come to an accurate conclusion as to the nature of the symptoms.

The prognosis of hysteria in childhood is better than in adults for the immediate attack, the symptoms actually present generally disappearing rapidly under appropriate treatment; but relapses are frequent, other hysterical disorders may show themselves later, and

unless the surroundings can be changed, the ultimate prognosis is not good.

Hysteria in Man.—With regard to hysteria in men the chief points of distinction are, briefly, that hereditary tendency is strongly marked, traumatism is, as would be expected from the nature of their occupations, far more common as a direct cause than in women, as a rule few of the general symptoms or the bearing popularly regarded as characteristic of hysteria are present, and the disease is apt to take the “monosymptomatic” form. Cases in men are often particularly obstinate of cure, various forms of paralysis and spasm are the commonest manifestations, and sensory disorders, though more often absent than in women, if they occur, are well marked.

CHAPTER XIV

DIAGNOSIS AND PROGNOSIS

THE diagnosis in a case of hysteria may be easy, indeed at times obvious, or, on the other hand, it may present great difficulty ; exceptionally, the problem cannot be satisfactorily solved. Mistakes in diagnosis are not infrequent, but, with due care, an accurate opinion of the case can generally be formed. In all nervous diseases the diagnosis depends upon the grouping of elementary symptoms, upon the *symptom-complex*, rather than upon the presence or absence of any one particular sign. Thus in hysteria there may be found, with a few exceptions, essentially the same signs and symptoms that occur in organic disease of the nervous system. Even the grouping of these signs and symptoms in a given case of hysteria may be such as is ordinarily met with in some organic diseases, and thus the difficulty of distinction still further increased. Moreover, organic nervous disease is not infrequently complicated by the presence of hysteria ; so that, first of all, the decision has to be made as to whether the case is one of hysteria at all, and then the further question to be answered, Are all the symp-

toms present due to hysteria, or do the signs of the neurosis co-exist with those of some organic disease of the nervous system? The same difficulty may be met with in cases of disease of the joints or muscles, or of some other organ which gives evidence of disordered function.

It is impossible here to allude to every form of the protean manifestations of hysteria which may present a difficult diagnostic problem. In any case of doubt it is better to wait and watch the patient for a while before coming to a definite decision. A little delay may result in the clearing up of the problem; as, for instance, when a symptom or symptoms of importance suddenly disappear without altering the general condition, or fresh symptoms as suddenly supervene, or where the signs change over to the opposite side of the body. The main points in the distinction of hysterical affections from organic disease of the organs of special sense, of the thoracic or abdominal viscera, or of the joints, have been alluded to in the description of these disorders, and the diagnosis must be made on the ordinary principles of clinical examination.

The point which has most frequently to be decided is, whether the symptoms of disturbance of the nervous system which are present are due to organic disease or to hysteria. In proceeding to make this decision the patient should be first examined for those signs which are unequivocal

evidence of organic disease of the nervous system, and then, whether some of these signs are present or not, since organic disease does not exclude the co-existence of hysteria, for the hysterical stigmata, which have been given above, *e.g.* the affections of sensation and of the special senses, and the various paroxysmal disturbances. It must, however, be remembered that a negative result as regards these stigmata does not certainly exclude the hysterical nature of some particular symptom, because although the presence of one or more of the so-called stigmata is valuable evidence of hysteria, they are absent in many cases. Amongst the most important signs of organic disease which are never seen in a purely hysterical case, and therefore preclude hysteria except as a complication, are optic neuritis and optic atrophy, absent knee-jerk or Achilles tendon-jerk, decided nystagmus, hemianopsia, an extensor plantar reflex, sustained and pronounced ankle-clonus, motor or sensory paralysis in the domain of a single nerve or nerve-root; while incontinence of urine and muscular atrophy with R.D. are the rarest possible phenomena (*v. supra*, p. 54). In any obscure nervous disease it is well also to think of lead-poisoning as a possible cause, and to look for a blue line on the gums. The general grouping of symptoms is also helpful; thus hemiplegia, not affecting the face, or attended with labio-glossal spasm, and accompanied by anæsthesia, in a young adult without

heart disease or any history of syphilis, is almost certainly hysterical.

To turn for a moment to some diseases in which the diagnosis is attended with special difficulty. The most important is disseminate sclerosis, because it often occurs in a non-typical form, presents a great variation in symptoms, is most common in young women, and its symptoms sometimes disappear, even for considerable periods.

Dr. Buzzard¹ gives the following points of resemblance and of difference. In disseminate sclerosis paralysis, as in hysteria, may come on suddenly, and own a psychical cause, but is not often complete, whereas in hysteria it is more absolute. Further, in the former it is often transitory, relapsing in the same or in a different limb. The paralysees of the oculo-motor muscles, which do not occur in hysteria, present the same characteristics.

Subjective feelings of deadness or numbness are most common in disseminate sclerosis, whilst in hysteria there is objective anæsthesia. The knee-jerks are often exaggerated in both, but are never absent in hysteria, although they sometimes are in disseminate sclerosis. Ankle clonus is well marked, and lasting in the latter, and occasionally is combined with an absent knee-jerk, whilst if present in the former it is weak and momen-

¹ "Simulation of Hysteria by Organic Disease of the Nervous System." London, 1891.

tary. Contractures are gradually established in sclerosis, suddenly in hysteria. An extensor plantar reflex is present in disseminate sclerosis, whilst the reflex is often absent in hysteria. In addition, there are the other signs of the former disease—optic atrophy, nystagmus, scanning speech, well-marked intention-tremor.

The chief points in the differential diagnosis of hemiplegia have been given. With regard to hemiplegic or other contractures of the limbs, a useful distinction is given by Buzzard. He says: "In true hemiplegic contracture . . . you cannot by any amount of force straighten the whole limb at one moment. If you straighten out the fingers, the wrist remains rigidly flexed. Bring the metacarpus into a line with the forearm by extending the wrist, the fingers will, *ipso facto*, become rigidly flexed." In hysterical contracture the forearm, hand, and fingers can be brought into the same plane.

It has been mentioned that the tendon reflexes, knee-jerks, wrist-jerks, ankle-jerks, are often increased in hysteria, a manifest and *unilateral* exaggeration of tendon-reflexes indicates, however, not hysteria but some organic lesion.

Paraplegia may give rise to considerable difficulty in diagnosis, and it must be remembered that a spastic paraplegia may be the expression of an early stage of disseminate sclerosis. Paraplegia from compression myelitis, especially in caries of the spine, or from a transverse dorsal

myelitis, with spastic contraction of the limbs, is sometimes closely simulated by hysterical paraplegia with contracture, and the distinction may be difficult. In hysteria, however, the onset is generally sudden; ankle clonus, if present, is of the spurious form, the plantar-reflexes are absent, or not extensor in type, and incontinence of urine is a most exceptional occurrence. If anæsthesia is present in the hysterical form, which is unfortunately not always the case, its distribution is a valuable aid, for it follows the distribution already described, whereas in transverse myelitis the upper limit of anæsthesia corresponds to the level of the lesion in the cord, and in compression myelitis loss of sensation appears late in the disease, after loss of motor power. The occurrence of bed-sores is against the hysterical origin of a case. Further, in compression myelitis from caries the pain is more limited and is constant in one place, whereas in hysteria, if present, it is apt to be diffused over a wider area and vary in the seat of greatest intensity.

An hysterical affection resembling tabes dorsalis has been described, but ordinary care should suffice to exclude this disease.

Cases of intra-cranial tumour, abscess, or meningitis have been mistaken in the early stages for hysteria, and there is no doubt that the difficulty of diagnosis is occasionally great. Especially is this the case where the intense pain of

organic disease makes the patient "hysterical" from loss of self-control, or where the cerebral affection is complicated by the presence of actual hysterical stigmata. Sometimes a mistake in diagnosis is due to the desire to give a positive opinion, in order to satisfy the friends, before the patient has been a sufficient time under observation.

It is hardly necessary to say that the failure to ascertain a cause for pain must not be relied upon in the diagnosis of hysteria. In meningitis the lapse of a very short time will solve the difficulty, which is greatest in cases of cerebral tumour or abscess situated in a "silent" area of the brain, and unaccompanied by optic neuritis. Fortunately, the absence of optic neuritis is rare in tumour, the greatest difficulty arising, in my experience, in those cases of abscess in which there is no sign of a primary focus of infection. The occasional occurrence of abscess of the brain in connection with bronchiectasis and other lung diseases should be remembered.

Mention may also be made of the peculiar form of acute lead-poisoning to which girls are especially liable. The symptoms generally come on soon after the patient has entered the lead-works, and may exactly resemble those of an outbreak of hysteria; sometimes, however, the apparently hysterical fits pass into a series of general convulsions, in which the patient becomes unconscious and dies.

The strange disorder known as "myasthenia

gravis," in which symptoms of bulbar origin are unattended by any recognisable lesion after death, may be taken for hysteria unless the description of the disease is familiar. The affection of voice, difficulty of swallowing, loss of power over the tongue and lips, and other bulbar symptoms, are generally accompanied by some oculomotor paralysis, by a similar paresis of one or more of the limbs, and by dyspnœa, or attacks of dyspnœa. The characteristic features of the disease are, however, quite distinctive. These are :—

(1) The patient can at first perform muscular actions, such as speaking, swallowing, &c., quite well, but as they are repeated, they become more and more feeble, until they can no longer be carried out; *e.g.* the patient speaks well at first, but after talking for a little time the voice becomes a whisper and then is lost altogether; and

(2) The "myasthenic reaction," in which the muscles react well at first to stimulation by the faradic current, but as the stimulation is continued, they soon cease to respond to it.

Amongst other diseases which, according to Buzzard,¹ may be mistaken for hysteria are isolated or sporadic cases of Friedreich's disease, where again the chief point is to remember that such cases occur, and isolated paralysis of the iliopsoas muscle.

¹ *Loc. cit.*

To sum up, there are very few cases of organic disease of the nervous system in which some symptom will not be present which is incompatible with pure hysteria, and many mistakes will be avoided by allowing a little time for observation before expressing a definite opinion, and by remembering that hysteria is not infrequent as a complication of organic disease, the signs of which may be unobtrusive until carefully sought for.

It may be worth while to recall that the nervous diseases which have been found to be most frequently complicated by the presence of hysteria are—disseminate sclerosis, alcoholic paralysis, tabes dorsalis, diseases of the spinal cord due to traumatism, hemiplegia due to hemorrhage or softening, syringomyelia, caries of the vertebræ, facial paralysis, chorea, and exophthalmic goitre.

Lastly, there is the difficulty of deciding, which is obviously not a question of the same pressing and practical importance, whether a given case is one of hysteria, neurasthenia, or of some other functional nervous disorder. The difference of opinion as to what exactly constitutes hysteria and neurasthenia makes it difficult to pronounce positively on this point, but if the view of hysteria taken in the foregoing account is, as I believe, the correct one, the presence of some of the various disorders of sensation, contractures, or paroxysmal manifestations above

described will be sufficient to class a case under hysteria. In neurasthenia the patients are generally older, the mode of origin is different, the symptoms are more vague and indefinite, the patient is more anxious about his symptoms, and is more often depressed; further, anæsthesia, marked contractures, or paralyses, are not seen in neurasthenia. It should be added, however, that in individual cases, especially in the milder ones, the border line between the two affections is often very difficult to define, and that hysteria is frequently complicated with neurasthenia, and *vice versâ*, what appeared at first to be neurasthenia later more nearly resembles hysteria. It sometimes comes to striking a balance between the two sets of symptoms, and deciding in favour of the predominating ones.

With regard to malingering, which is often especially difficult to distinguish from functional nervous disorders, no special rules can be laid down; the chief aid to diagnosis is a sound knowledge of the phenomena of disease, whether organic or functional.

Prognosis.—The prognosis in a case of hysteria is difficult, on account of the very variable nature of the disorder, and the absence of any definite course. In fact, mention has been made above of the very indefinite duration of the symptoms. The differences which are due to age and sex have already been considered, and it has been pointed out that in children the symptoms

actually present are easy of cure, when proper measures are taken, but that there is a special danger in them to a relapse, or to the later development of fresh symptoms.

The same applies to young women in the years succeeding childhood, in so far that in these cases the particular symptom present can be usually relieved.

Speaking generally, the more marked the hereditary taint, and the more strongly the hysterical signs depend on this, the more difficult is the cure, whilst in those cases in which a more direct cause for the symptoms can be traced, the chance of complete amelioration is greater. An exception must perhaps be made for some cases of traumatic origin, in which the resulting symptoms are sometimes very persistent, but other circumstances, such as impending legislation, are often at work here to aggravate the condition. One reason of the difference between the two sets of cases is the possibility in most acquired cases of changing the conditions which have produced the disease, for in those in which it has not been possible to alter the conditions of life under which the neurosis has developed, the result has not been any more favourable than in patients with a pronounced hereditary predisposition.

In cases where, owing to marked hereditary tendency, or from unfavourable surroundings, or the two combined, the disease has come on

early, and has given rise to repeated hysterical manifestations of various kinds, the prognosis is very unfavourable. Where also the sensory disturbances are well marked and persistent, the prognosis is bad. So long as anæsthesia remains the patient is liable to an hysterical outbreak of some kind.

Certain forms of hysteria are especially apt to relapse, when they have once occurred. Thus aphonia may return again and again; tremor and other forms of rhythmical movement are liable to recur. Spasmodic contractions of the limbs, apart from the formation of adhesions, are difficult of relief, if they have lasted any length of time; in fact, as Charcot long ago insisted, the longer an hysterical symptom has lasted, the more difficult it is of cure. Taken in hand at once, hysterical symptoms are much more capable of rapid amelioration.

The tendency then in any particular symptom is for it to disappear at some time or other, though its duration is very indefinite. However severe or long-lasting a symptom has been, it can, with a few exceptions, always get well, and often does so with remarkable suddenness. Whether such a patient will suffer from future manifestations of the same or another kind, must depend on the degree to which the hysterical constitution is present, and the circumstances in which he or she is likely to be placed.

In slight attacks, with a well-defined cause,

there may never be a reappearance of the disorder.

As to life, the prognosis is in the vast majority of cases absolutely good, and this is hardly affected by the small number of cases on record in which death has occurred. Perhaps the most dangerous cases are those in which anorexia nervosa has gone on to a profound degree of inanition.

CHAPTER XV

TREATMENT OF HYSTERIA

I. PROPHYLACTIC TREATMENT

THE chief measures for prophylaxis in hysteria can be inferred from what has been said with regard to the etiology of the disease. In cases where there is a marked hereditary tendency to hysteria, or in which signs of a neuropathic temperament show themselves in early life, preventive treatment must begin in childhood. Where the mother is hysterical, or the conditions of the family life such as to further the development of the disease, the child should be sent away from home to school. Where the domestic conditions are more favourable this is not necessary, provided that the parents are willing for a suitable training to be carried out at home. As regards education and school-life care must be taken that school-work is not unduly pressed, and sufficient time allowed for recreation. Steady, regular work, with a due amount of recreation, is good: excessive work under pressure, even for short periods, as, for instance, school examinations, is not to be permitted.

These children require a simple, sufficient diet, rather more than a full allowance of sleep, no lessons in the evening before bed, and abundance of time spent in the open air. A sound physical training of the muscular system in healthy outdoor exercises is essential. Especial care must be taken to guard against bad sexual habits. Girls during the catamenial periods, and especially at the time of the first appearance of the catamenia, also require to be carefully looked after.

It is superfluous to mention the importance of a sound moral training, or to insist on how much can be done for a neurotic child by firm and judicious training, combined with sympathetic insight into character, by inculcating habits of perseverance, by developing the power of self-control, and by checking tendencies to excessive emotional excitability.

When the school-time is passed a healthy out-door life is still advisable, and a great deal depends at this impressionable age on the influences under which the girl comes. Firm but kindly and sympathetic guidance is required, and the question will again have to be decided as to whether the home surroundings are suitable for her, or whether she had better adopt some occupation away from home. Some occupation is essential, and it should be one which will sufficiently engage the attention and interest without unduly exciting. Such occupations as

needlework, &c., which allow introspection and day-dreaming, are not good. The study of music requires regulation ; many of these patients have musical gifts, and these may be cultivated, unless music causes too great emotional fervour, and provided the hours devoted to practice are not too long.

With regard to social pleasures, undue social excitement is of course bad, but within bounds, hysterical patients are the better for cheerful society, and frequent opportunities of meeting their friends.

2. GENERAL TREATMENT

The above remarks also apply to patients who have already developed hysterical symptoms. It is often very difficult to find a suitable occupation for them ; lack of decision and absence of definite tastes are the most frequent obstacles. Though philanthropic pursuits are often useful, these may be carried a great deal too far, and hysterical patients are not well adapted, as a rule, for visiting the sick and the poor. Especially is it necessary to restrain them if they are called upon to nurse a sick member of their own family ; overstrain, combined with anxiety as to the event of the illness, is often the cause of a breakdown. A caution may also be given against the over-frequenting of religious missions or revivalistic services.

A question much discussed is that of the advisability of marriage, in former times regarded almost as a panacea for hysteria, because the disorder was then considered to be of uterine origin, and advocated in more recent times, because until lately most other careers were closed to women, and they had not the same diversity of pursuits and interests that are now open to them. Too much must not be expected from marriage in this respect ; there is no doubt that a happy marriage, with favourable conditions of life, often cures previous hysteria ; on the other hand, the strain of childbearing and nursing may decidedly aggravate it.

In every case of hysteria, a careful examination is needed to detect whether there is any other disease present. It is perhaps especially necessary to carefully exclude tuberculosis. Anæmia is common in young hysterical patients, and relief of this not unfrequently brings with it disappearance of mild hysterical symptoms. Heart disease, or any other visceral affection that may be present, must be treated on ordinary lines. Disorders of the sexual organs, though not a frequent cause of hysteria, underlie some cases. If any such disease is present, the same course of treatment should be carried out that would be done were the patient not hysterical, with the proviso that such treatment must be effectual, and carried out in as short a time as possible in order to entail the least possible

direction of the patient's attention to these organs. In short, in every case in which hysteria is complicated by organic disease of whatever nature, the proper treatment of the latter must be carried out irrespective of the hysterical symptoms. Difficulty most often arises in the complication of hysterical symptoms with organic nervous disease, but the former can generally be relieved by measures which are not hurtful to the latter.

In dealing with every form of hysteria success mostly depends on the influence exercised by the physician himself. The medical attendant must gain his patient's confidence, let her feel that he thoroughly understands her case and can cure her. He must unite sympathy with firmness, exert a moral force in constantly directing her towards recovery, and in insisting on all the measures he recommends being rigidly and exactly carried out. It is just as well that these patients should understand that their case is not unique, as they often imagine, and also that it is quite within the resources of the medical art. Whilst letting the patient see that she is thought to be capable of making efforts to overcome her disabilities, that she can help herself, and from time to time demonstrating to her that she can do more than she imagined, the mistake must never be made of treating her symptoms as imaginary or of holding them up to derision. Such a course simply results in convincing the

patient that her medical attendant "does not understand her case" and nullifies any further effort on his part.

The treatment of hysteria involves then that the physician has a thorough confidence in his diagnosis, and is prepared to act upon it promptly, decisively, and thoroughly. At the same time, the diagnosis, especially from nervous disease, is often one of the most difficult in medicine, and may demand a wide knowledge and experience of nervous disorders.

What course is to be pursued when the diagnosis remains doubtful in spite of every effort to arrive at an exact conclusion? In such a contingency the proper course is to wait for a while and watch the symptoms. This can be done whilst, during the interval, some simple measures are prescribed. Often the lapse of a little time, and the opportunity for close observation, clears up the difficulty, and suitable treatment can then be energetically carried out.

Occasionally, however, time cannot be secured, or the case may be one, if it is to be successfully treated at all, which must be dealt with promptly and decisively. The risk must then be taken, and if an error is sometimes made, it must be regarded as the price paid for success in the greatest number of cases. This contingency will, however, rarely arrive; there is generally ample time for decision, and the mistake is more frequently made of speaking too confidently

about a case before it has been sufficiently observed, when there is no need for an immediate expression of opinion.

As a part of the moral influence, for such it is, exerted by the physician over his patient, the influence of suggestions made in the patient's hearing, or directly to her, may be often advantageously employed. He may promise her recovery, predict the course of her illness, suggest that present improvement is the prelude to regaining health, and so on. Cure is often effected by unwearying patience, steady encouragement, and sometimes by force of will.

On the other hand, the effect of judicious neglect of symptoms may be mentioned. Neglect to inquire into, or to examine for, certain symptoms, after a previous thorough investigation of the case, often has the best result. Symptoms which excite no interest or anxiety in the attendants have a way of disappearing after a time. Especially is this the case with certain minor hysterical manifestations, such as coughs, articulatory noises, spasms, twitchings, and the like.

Should the medical man attempt to cure the patient out of hand? This question can hardly be decided in a general sense, it must depend upon the individual circumstances, and also upon both patient and doctor. Such a course is most often successful in paralysis; the paraplegic patient may, for instance, be taken out of bed and told to walk, and if she falls on the floor, left there

until she makes her way back to bed again unaided. When she has done this, the difficulties of treatment are practically over. It does not do, however, for measures of this kind to fail ; failure results in considerable protraction of treatment, or perhaps the disease may ultimately baffle the doctor. I think the duration of the disease is a point of importance before deciding upon a measure of this kind : long-standing disorders are not so easily cured in this way as recent ones. Take the symptom above given, paraplegia ; in a case of long duration the patient may have contracted adhesions about the joints, or have apparently forgotten how to walk, and require to be taught—in such cases the process of cure must be gradual. So in hysterical heart affections ; if they are recent it is correct, and will produce the best results, to assure the patient that her heart is sound, and that she may run or do what she likes ; but such a course might be disastrous for one who had lain in bed for a year or two for supposed heart-disease, and had become fat and out of condition from want of exercise.

From which it follows, as has already been insisted upon, that early treatment of hysterical symptoms is one of the most important indications.

Next in importance comes isolation, or the separation of the patient from her surroundings. In mild cases this may be unnecessary, but in those of any severity or persistence it is abso-

lutely essential. In the case of poor people, removal to a hospital gives the necessary isolation from friends, and an ordinary case can often be cured in the general ward, but in an aggravated case, or in any instance in which improvement does not at once occur, it is necessary to put the patient into a private ward, to prevent her getting a fresh audience.

In patients of a superior class, in some instances if the surroundings are more favourable than usual, if a good nurse can be procured, and if the friends will allow the doctor a free hand in the treatment, a cure can be effected at home when the disease has been of short duration. In all cases where symptoms are of any severity or duration, where the friends throw difficulties in the way of treatment, it is advisable to move the patient from home. This is, in fact, necessary in the majority, and saves both time and expense.

In cases with symptoms of moderate severity, it is often quite sufficient to send the patient away with a nurse to the seaside or into the country. If this be done, it is essential that the nurse should be known to have had experience in such cases, and to possess the necessary qualities, by no means a common gift, for nursing the hysterical. In severe cases of protracted duration, whatever the especial symptoms may be, in those of well-marked paraplegia or hemiplegia, in contractures, in hysterical angina pectoris, in persistent vomiting, in cases

with frequent convulsive attacks of whatever nature, in those especially of anorexia nervosa, and in all cases in which the general nutrition has suffered, it is better to carry out isolation in an institution where other aids to cure can be obtained, and the full Weir-Mitchell treatment employed. Here, again, the nurse must be especially chosen, as having the necessary qualifications of tact, firmness, and sympathy; as the patient is to be shut up in her companionship for some time, care should be taken that the nurse is a person of some refinement, and has had a fair education. So much depends upon the nurse in both forms of isolation treatment that if she is not satisfactory she should be changed at once. However good a nurse she may be, if her companionship is uncongenial to the patient, it is hardly ever advisable to keep her. The close association entailed by isolation treatment renders it essential that the nurse should be agreeable to the patient, and at the same time able to effectively carry out the measures prescribed.

Isolation should at first be complete, no letters being allowed from friends or relatives. After the first two or three weeks, if good progress is being made, this rule may be relaxed. It is often difficult to get the friends to consent to this isolation of the patient, but if the medical man has made up his mind that it is necessary in any particular instance, and the

friends decline to allow it, it is better to give up the case rather than to go on and risk failure. If the friends consent, but the patient refuses to undergo the cure, pressure may be brought to bear upon the latter by telling the friends that the condition is curable, and that a critical point in the illness has now been arrived at, when the decision must be made between carrying out the necessary, though irksome, process of cure, or allowing a lapse into invalidism, which may become permanent, with all its attendant misery both to the sufferer and her relatives.

The Weir-Mitchell treatment is most useful in the cases above mentioned, especially in those of much emaciation from anorexia, or vomiting, and of long-standing paralysis or contractions. The essential points in it are isolation, rest, massage, and over-feeding, with or without galvanism. Rest at first is to be absolute, but as improvement takes place the patient may be allowed to sit up in bed for her meals, and after four to six weeks to sit in a chair for ten minutes twice a day. This time is gradually increased to an hour, and then the patient is allowed to walk a little, later on to go for drives, and gradually to return to a normal activity.

Massage is begun on the second or third day, and is to consist "of gentle stroking of the whole body for from fifteen to twenty minutes, for the first two or three days, then going on to thorough deep massage of the entire surface of the body

and limbs, exclusive of the head and neck, and be rapidly increased in duration to an hour or an hour and a half daily.”¹

The massage is given by a separate masseuse, and not by the nurse in charge of the patient, who has enough to do in other ways, but in the evening the latter can give the patient a light rubbing all over. During the first part of the treatment massage may be given once or twice a day; when the patient begins to sit up, it may be dropped in the afternoon. Care must be taken that the masseuse is competent, and does her work well; the best test is the patient's power of digesting and assimilating food; a deposit of urates in the urine is evidence that the food given is not being properly utilised. Either the massage is ineffective, and the masseuse must be changed, or the diet must be modified. Instead of the second massage, which is not often necessary, the nurse may in the evening give a “sheet-bath.” For this the patient is enveloped, except the head, in a sheet wrung out of water. The nurse then rubs the body all over for one to three minutes, then wraps the patient in a warm, dry sheet, and gives light rubbing all over for ten to fifteen minutes. The temperature of the water should be, in the first baths, about 80° F., and gradually reduced to 55° F.

As to diet, at first three ounces of milk are

¹ Dr. J. K. Mitchell in Hare's “System of Practical Therapeutics,” vol. i. p. 238.

given every three hours, in two days five ounces, and in a little longer ten ounces. Some authorities, especially in cases of anorexia nervosa, prefer to begin with peptonised or skimmed milk. After the first few days plasmon may be added to the milk. After five days or so fish, then chicken or meat are given for dinner, then more food is added for breakfast and dinner until the patient, in about ten days, is on the full diet, consisting of three full meals a day, in addition to three or four pints of milk. By this time the full period of massage will also have been reached.

It may be added that it is not always necessary to begin with so restricted a diet, and some writers recommend that a modified ordinary diet containing light solids should be given from the first, and the full diet reached more rapidly. Further, it seems an impossibility for some patients to digest milk in quantity, and then meat soups or broths containing Plasmon, or thickened with vegetables, and such foods as Benger's or Mellin's Food, malted milk, somatose, &c., may be substituted for some of it.

The gain of weight is the best criterion of progress. According to Dr. Ormerod,¹ an emaciated patient may at first gain five or six pounds, and should gain at least two pounds per week.

If the excessive diet causes dyspepsia, the ex-

¹ Art. Hyst., Allbutt's "System of Medicine," vol. viii.

clusive milk diet must be returned to for twenty-four to forty-eight hours. Dr. Ormerod quotes from Dr. Playfair the following full diet list :—

Breakfast. Plate of porridge with cream, fish or bacon, cocoa or *café au lait*.

At 11 A.M. Cup of beef-tea, with two teaspoonfuls of beef peptonoids.

Lunch at 1.30. Fish, cutlets, or joint, stewed fruit or milk pudding.

At 5 P.M. Same as 11 A.M.

Dinner at 7. Soup or fish, joint or poultry, sweet.

With, in addition, three to four pints of milk.

In addition to the above, the application of a mild faradic current, just sufficient to contract the muscles, may be made for fifteen minutes in the afternoon.

Tonics such as iron, quinine, strychnine, and arsenic are often useful, or necessary to meet special indications for treatment.

In very fat patients preliminary treatment by skim milk in small quantities, with absolute rest in bed, should be carried out ; or the amount of proteids in the full diet may be increased, and that of the carbohydrates and fats diminished, skim milk being used.

Sleeplessness is sometimes a trouble during the first part of the treatment ; for this twenty grains of sulphonal in hot milk, at 8 P.M., is a good remedy ; a few doses only are as a rule necessary. The sheet-bath often induces sleep. Sometimes

a dose of bromide is effectual. Constipation can be treated by abdominal massage, by exercises in the late stages of the treatment, or, if these measures fail, by aperients or enemata. For patients who are not very weak or emaciated, provided the cardinal conditions of isolation, rest, and a full diet are insured, and massage or electricity employed, various modifications may be made in the treatment. For instance, the employment of some form of hydrotherapy is advantageous in most, and in many, if the appliances are handy, there is great benefit from the daily use of the electric bath, for which a sinusoidal current from a coil worked from the street supply may be used.

I append a daily programme of the full rest cure as given by Dr. J. K. Mitchell¹ :—

7 A.M. Cocoa, cool sponge bath with rough rub, and toilet for the day.

8 A.M. Breakfast with milk, one hour's rest.

10 A.M. 8 oz. peptonised milk.

11 A.M. Massage.

12 noon. 8 oz. milk or soup, reading aloud by nurse half-an-hour.

1.30 P.M. Dinner, rest an hour.

3.30 P.M. 8 oz. peptonised milk.

4 P.M. Electricity.

6.30 P.M. Supper with milk, rest an hour.

8 P.M. Reading aloud by nurse half-an-hour.

9 P.M. Light rubbing by nurse with sheet-bath.

¹ *Loc. cit.*

3 oz. malt extract with meals, tonic after meals.

8 oz. peptonised milk with biscuit at bedtime, and a glass of milk during the night if desired.

Later in treatment Swedish movements are added to massage.

At the conclusion of the treatment, a short stay with the nurse at some bracing health resort is advisable. The seaside does not always agree with hysterical patients, but is generally suitable in the young. It is useful for the nurse to accompany the patient on her return home, and to stay a few days in the family, in order that they may see the improvement that has taken place, and that the presence of the nurse may act as a check in keeping the patient up to the mark. After an active life has been resumed, it is well to insist on one hour's absolute rest before or after lunch, and between 6 and 7 P.M., for a time.

The duration of treatment will be, on the average, eight to twelve weeks—in mild cases, perhaps less; but it is well to say at first that no definite time-limit can be fixed beforehand, and that the duration must depend on the progress made.

Hydrotherapy is often most useful on account of its bracing, and at the same time soothing, effect upon the nervous system. The most effectual form is the application of a douche, at first at a temperature of 80° F., later at 50° to 60° F., to the trunk and limbs for fifteen to twenty

seconds, ending at the feet and avoiding the head. This may be used once or twice a day, and followed by a brisk rubbing to promote a reaction. Or the patient may sit in a bath in tepid water, and the trunk be rapidly sponged over with cold water and then rubbed. Other forms of bath may be used. Sometimes a brief shower-bath, if followed by a good reaction, is especially useful.

Electricity may be employed either for its general effect, or to relieve special symptoms. For the former general faradisation may be used, or the electric bath.¹

Static electricity is frequently employed, and is said by many observers to be the best form to use in hysteria. If a strong mental effect is especially desired the patient may receive a charge, and then sparks be taken from the part of the body affected. Of the high frequency current I have had little experience, but so far it has not seemed more useful than other forms of electricity in hysterical paralysis, spasm, or contracture. The patient is seated (auto-condensation method) on a properly insulated chair or couch, and the "breeze" from an electrode applied to the part desired, or if a greater effect is desired some sparking, which is slightly painful, may be allowed.

Treatment of Special Symptoms.—The special applications of electricity are for (1) paralysis,

¹ For electric baths, see under Neurasthenia, p. 281.

in which case the faradic current is often very effectual. In laryngeal paralysis an endolaryngeal electrode should be used. This frequently relieves the aphonia at once, but too often the cure is only transitory. The mental effect is probably the chief factor in the relief of hysterical paralysis by electricity.

(2) For anæsthesia, in which case a wire brush with a fairly strong faradic current is to be used.

Severe and long-standing cases of paralysis often necessitate a long course of treatment by massage, baths, electricity, and passive manipulations. Such cases, as has been said, often require to be taught to walk again, step by step, and require much patience and encouragement in dealing with them.

For the Relief of Pain, as in arthralgia, rachialgia, and neuralgia, both electricity and hydrotherapeutics are useful. The "breeze" from the high-frequency current promises to be of aid in these affections. Sponging with very hot water was recommended by Paget for hysterical joints, and is often extremely valuable in rachialgia; heat in the latter case may be conveniently applied by a piece of spongiopiline, the length of the spine, and three to four inches broad, saturated with water as hot as can be borne.

The hot-air bath is of service in painful joints, especially when they are associated with contractures.

Treatment of Convulsions.—Unless very severe and frequently repeated, hysterical fits are best left without any special treatment. Under the general measures which have been recommended above, the convulsions will disappear as the patient improves. The effect of isolation is very good in this respect: often the patient, from the time isolation has been effected, has no return of convulsions. In other cases, a good plan is to lay the patient on the floor, where she can come to no harm, and leave her by herself until she comes round. Treated in this way, the fits often cease very quickly.

If any special treatment is needed, the application of a strong faradic current is an effectual method. Free affusion of cold water dashed against the face, or water poured from a little height upon it, are time-honoured measures. In severe convulsions, hyoscine is said to be an effectual remedy. Dr. Ormerod¹ recommends Potass. bromid., gr. x., with Tinct. digitalis, as useful in reducing the number of attacks when they are very numerous.

For attacks of hysterical sleep or trance, it is sufficient to see that the patient takes enough food, which, if necessary, must be given by the stomach tube, and that the bowels are properly evacuated. A dose of

¹ *Loc. cit.*

bromide twice or three times daily may also be given.

Contractures.—When these are recent and limited in extent, the general measures recommended above, with massage and passive movements, are sufficient to deal with them. In long-standing cases adhesions may form around or in the joints, and the abnormal position of the limb be also maintained by shortened bands of fascia and fibrous tissue. Under these conditions an anæsthetic should be given, the adhesions broken down, and the joint freely moved. The limb is then placed extended on a splint. I believe that in old-standing cases the patient sometimes has a firm conviction that the limb cannot be got back into a normal position, and one element in cure is the mental surprise produced on recovery from the anæsthetic by finding the limb in a natural posture. A little fluid effusion in the joint may occur after it has been freely moved, but this as a rule soon subsides. Pain may necessitate a dose of morphia on the following night. The limb should not be kept fixed on a splint for any length of time, but the following day, or after a few days if there is effusion into the joint, and on each succeeding day, should be freely moved and the splints replaced, to be discarded altogether as soon as possible, and extension maintained by a weight for some hours daily or at night. The patient should be prevailed upon to move the limb herself.

In still more severe cases, it may be found during examination under the anæsthetic that the contracted muscles prevent movement of the joint, and in that case, if the conditions cannot be rectified by massage, movements, extension by weights and the like, tenotomy of the shortened tendons must be performed.

In old-standing contractures involving many joints, the process of cure is most tedious and difficult, but no surgical procedures, though as just stated tenotomies may be sometimes necessary, should be adopted until it is certain that cure is impossible by other methods.

It may be said here that surgical operations, except for an occasional tenotomy, are unnecessary and unjustifiable in all forms of hysterical affections.

With regard to the treatment of hysteria by *hypnotism*, on the theoretical grounds that the phenomena of both states present so many analogies, it would seem unwise to employ it. On practical grounds it is very rarely necessary, for the great majority of cases can be effectually treated by methods less open to objection. In very obstinate and inveterate hysterical affections, which have resisted other forms of treatment thoroughly carried out, hypnotism may rarely find its limited application. It is often just such cases, however, that are not amenable to hypnotic suggestion. If hypnotism is to be employed, it should only be by a skilled hypnotiser, and according to

the rules laid down by Pitres—(1) only with the patient's consent, (2) in the presence of others, and (3) only to give suggestions useful for cure. Attempts at hypnotism by unskilled persons are to be entirely condemned; their only result is likely to be an aggravation of the disease.

As regards drugs, the routine administration of medicines is not necessary. Tonics in some form or other are, however, often advisable. Of nerve tonics, the valerianate of zinc, gr. i.—gr. ii., combined with quinine and strychnine in a pill, is one of the most useful. An excellent combination is valerianate of zinc with the Pil. Galbani Co. Arsenic, iron, and the hypophosphites are often of service. For patients whose nutrition is poor, and who suffer much from cold, cod-liver oil in some form is valuable during the winter months.

The bromides in small or moderate doses may be given with advantage in combination with iron, arsenic, or nux vomica. They should not be given continuously, but are useful for short periods; for instance, to combat excitement or overcome sleeplessness. A dose of antipyrin and bromide, ten or fifteen grains of each, is especially useful for these ends. Opium, morphine, and chloral should be avoided on account of the danger of forming a habit; if required for special emergencies, they should be given only under the direct supervision of the medical attendant. The same rule applies to the numerous remedies for

insomnia at present in vogue. If it is necessary to treat insomnia by drugs, a dose of paraldehyde, which is generally effectual, and not likely to lead to any habit, or one of sulphonal or trional may be administered.

NEURASTHENIA

CHAPTER XVI

HISTORY AND ETIOLOGY

HISTORY

THE question has been much debated whether neurasthenia is a new disease, an unwelcome product of modern civilisation. Neurasthenia is mostly a disease of brain-workers, and especially of those thus engaged who live under the stress of disadvantageous circumstances. It would, I suppose, be readily admitted that more men and women than at any other time in the world's history, now live by brain-work, in proportion to those who support themselves by manual labour. In addition, the excessive competition and feverish activity of modern life, the greatly increased means of locomotion and intercommunication, the emotional excitement and often unhealthy conditions of life in great cities, are all factors which conduce to nervous disorders, so that we shall probably not be wrong in supposing that these affections are more widely prevalent than in previous ages.

To say that in this sense neurasthenia is a

disease of modern civilisation is a totally different statement from saying that it is a new disease, for which there is no evidence. It is more rational to suppose that whenever the conditions of life in the higher civilisations of ancient times approached the modern ones, there neurasthenia would be found. The recognition of it as a clinical entity is, however, entirely modern, and is no unimportant part of the great advance made in the knowledge of diseases of the nervous system during the past generation.

To Beard of New York is due the chief credit of the more complete separation of neurasthenia as a morbid state distinct from the more or less vague nervous disorders with which it had been previously confounded. His work on "Neurasthenia; its Symptoms, Nature, Consequences, and Treatment," appeared in 1880, and one entitled, "American Nervousness," in 1881. He also communicated many papers to the medical journals on the subject. Beard's great powers of accurate and original observation enabled him to give a clinical description of the disease, pointing out many signs previously ignored, and putting others known before in a new light. Beard's views met with strong opposition at first, and were some time in making their way, but gradually the accuracy and truth of his observations have been fully verified, and the existence of the condition neurasthenia generally recognised. Like most other profes-

sions, the medical profession is apt to be conservative in its views—it is difficult to reconcile oneself to the fact that one has been looking at a disease all the time without recognising it—and this conservatism has perhaps been especially manifested in its attitude towards functional nervous diseases, and probably rightly so, as these affections offer considerable opportunity for the downfall of the too credulous.

Arndt, in his historical survey of our knowledge of neurasthenia, says that Fernel first described with any accuracy the disease in his book, *De abditis rerum causis*. Fernel ascribed various hysterical and nervous affections to “vapours” arising from suppressed seminal and menstrual discharges.

During the latter part of the eighteenth century there are frequent references both in medical and also in general literature to the affection known as the Vapours, under which various neuroses were classed, and which comprised chiefly hysterical disorders.

Dr. Robert Whytt of Edinburgh, 1764, first divided such disorders into nervousness, hysteria, and hypochondriasis; his book was entitled, “Nervous, Hypochondriac, or Hysteric Diseases,” but according to Dr. Dana,¹ he did not describe anything like modern neurasthenia.

¹ “Twentieth Century Practice of Medicine,” vol. x., article, Neurasthenia, to which article and to Prof. Allbutt’s on Neurasthenia in his “System of Medicine,” vol. viii., I am chiefly indebted for the historical references in the text.

In the first half of the nineteenth century further contributions were made to the subject, especially to the spinal form of it. In 1834 the brothers Griffin published a work on "Spinal Irritation," in which neurasthenic symptoms were referred to disease of the sensory nerves of the spine.

Bouchut, in his well-known work, *De l'état nerveux aigu et chronique, ou nervoisme, appelé neuropathie*," printed about the year 1857, was the first to clearly distinguish the symptoms properly belonging to neurasthenia, to separate the disease from hypochondriasis and hysteria, and to claim for it a position as a distinct malady.

Then, as we have said, followed Beard, and since his death a very extensive literature has grown up on the subject.

ETIOLOGY

First, with regard to age and sex neurasthenia is more common amongst men than amongst women, if we take all cases together. In those cases from the working classes which gain admittance into a hospital ward, and are generally of a severe type, I find that women predominate, and this is probably to be attributed to the strain of child-bearing and lactation, with often insufficient means of support. As to age, from eighteen to fifty-five years are about the limits of incidence, but the large majority of cases are between thirty and fifty years of age. In this respect I also

find that in the hospital cases the average age of the patients is a few years higher than in those drawn from a higher social stratum. In the latter the average age is about thirty-four. As to the influence of class and occupation the victims of neurasthenia are drawn from all classes and from all occupations, but it is essentially a disease of those who earn their living by brain-work. Those occupations are particularly apt to give rise to neurasthenia which yield a slender and precarious means of subsistence, at the expense of much anxiety, responsibility, and interference with proper rest. Merchants, manufacturers, managers of large businesses, all engaged in pursuits in which, besides hard work, there is often much harassing strain and anxiety, clerks, teachers, professors, and students give the largest proportion of cases. A hot and enervating climate is, according to some authors, an important cause.

The more highly civilised races suffer more from the disease than those lower in the scale. In these islands that part of the population which derives from the Celtic peoples is perhaps rather more prone to it. Jews are especially often affected, probably from their mode of life and consanguineous marriages through many centuries. The Americans are commonly held to be particularly affected by neurasthenia, and Dr. Dana states¹ that this reputation is deserved. Beard when he described neurasthenia considered

¹ *Loc. cit.*

it "an American disease." It is, however, only right to add that many authors think that race and climate are of no special importance.

Social Conditions.—Apart from occupation, the influence of life in a large city probably predisposes in susceptible persons to neurasthenia, for it is found that those who live in the country or in small towns afford a relatively small proportion of cases. In cities the struggle for a livelihood is keener, the competition more severe, and when work is over there is the temptation to indulge in a round of exciting amusements, and often in dissipation, instead of taking rest. The great and rapid changes in the social conditions of the present day must also be taken into account, involving, as it does, the breaking down of the old barriers between classes, and the constant struggle to rise into a higher position or to ensure a more certain one.

The influence of heredity is important. Direct inheritance of neurasthenia is rare, but on inquiry into the family histories of patients it is usually found that upon one or other side there is a history of some neurosis, or nervous disease, or less often of insanity. More commonly the history is one of the existence of the milder nervous disorders. In short, neurasthenic patients not infrequently exhibit the "neuropathic taint." In young patients the influence of heredity is more marked. It is difficult to say exactly what proportion of neurasthenic

patients show this neuropathic tendency. Proust and Ballet¹ estimate it at 40 per cent., Collins and Phillips at over 50 per cent. in American cases.² Lowenfeld³ attaches importance to variations in the calibre of the cerebral vessels, and thinks that in neurasthenia the development of these vessels may be proportionately defective to the size of the brain, and that hence the latter suffers in nutrition.

Other diseases which are most frequent in the family history of neurasthenia are gout, rheumatism, and tuberculosis. The latter, though frequent in all ranks, is in my experience especially common in neurasthenic patients of the hospital class. Gout as a marked hereditary influence is only occasionally seen, but in those cases of neurasthenia with a family history of gout, and with the uric acid diathesis, the symptoms are usually severe and persistent. Alcoholism in one or other parent is also not an infrequent antecedent.

Passing from the question of heredity to those cases of neurasthenia which occur in adolescence, the influence of education and of the school-life here plays a large part. The over-cultivation of the intellect at the expense of the body by long hours of school-work, which leave insufficient time for fresh air and exercise at an age when

¹ "Treatment of Neurasthenia," transl. London: 1902.

² *New York Med. Rec.*, March 1899.

³ *Hysterie u. Neurasthenie*, vol. i. p. 93, 1894.

the growth and development of the body is taking place, is largely to blame. Fortunately for us the system at our public schools provides a sound physical training by games played in the open air. It is chiefly in the more advanced schools and in the upper forms, consisting of boys and girls over the age of sixteen, and of the most mentally gifted, who have reached a stage at which they are preparing for examinations, that overstrain is likely to occur. The same statements apply even more to students at college, for the temptation is strong for the ambitious student to indulge in excessive work, which involves long hours of sedentary occupation, and moreover is often done under the pressure and anxiety of approaching examinations which may affect the whole of the future career. Conditions well-fitted to lead to neurasthenia in adolescence. To these factors must be added the too frequently defective hygiene, the vitiated air of an over-crowded or ill-ventilated classroom, and sometimes neglect of personal hygiene and abuse of the sexual functions.

On the other hand a defective education or school-training sometimes aid in the production of neurasthenia in quite another way, when, for instance, a man finds himself in a position, or obliged to undertake work, with which his education has not rendered him fit to cope. The constant strain involved in the effort to do work of which he never completely obtains the mastery

may thus lead to a breakdown. The frequent occurrence of neurasthenia amongst clerks is partly due to the present tendency to consider such an occupation one of superior respectability to a mechanical calling, and thus many persons who would have remained healthy as mechanical craftsmen break down in occupations involving brain-work and a sedentary life, for which they are unfitted.

Exciting Causes

With regard to the exciting causes of neurasthenia, these are :—

1. Overwork or Overstrain.

The first question to be answered here is whether excessive intellectual work *per se* produces neurasthenia? Probably it rarely does so. Such cases are occasionally met with, but they form a very small group of neurasthenics. Whilst hard mental work done without haste or hurry may seem at first sight to be the sole cause of neurasthenia, this is not often really the case; frequently there is in such persons an hereditary tendency to the disease, which becomes evident on further investigation.

The matter is altogether different when severe mental work has to be done under pressure of time, for instance, of preparing for an important examination; here the anxiety of not being ready with the allotted task, or of failing at the supreme moment, brings an added strain,

and both together are responsible for the breakdown. Many occupations and businesses of the present day, besides the actual mental work, also entail anxiety, harassing cares, and continual watchfulness. In order to compel success, a man makes his hours of business excessively long, and leaves no sufficient time for rest. It must also be borne in mind that it is the continuation of overwork and anxiety over long periods which gradually wears down the resistance of the nervous system. For a short time nearly every man can stand excessive mental work and even the strain of anxiety, if he knows that the effort has not to be prolonged. The more the nature of the business engaged in involves risks which cannot be foreseen, the greater the danger from our point of view. Further, there is the point as to whether the business is one of a congenial nature: a man engaged in an occupation distasteful to him experiences greater effort in carrying it on. Money losses, unsuccessful speculations or ventures, and domestic troubles, will often suffice to turn the scale in the case of a man who, from long overwork, has been for some time on the verge of neurasthenia. Overwork is, of course, not only of the mental kind. Neurasthenia is sometimes met with as the result of excessive physical labour only, but this form is not at all common. Sometimes it is the result of excessive indulgence in athletic pursuits. More often it is the outcome of a

combination of excessive physical exercise with mental work. There is a prevalent idea amongst young men that over-fatigue from brain work is relieved by violent physical exercise. In many instances they merely add the burden of tired muscles to that of a jaded brain.

The leading of what is called a "society life" must also be put down as a cause of neurasthenia. Nothing is more exhausting to the nervous system than a constant round of excitement, the continual pursuit of pleasure with enjoyment as the one end and aim of life, involving, as it does, late hours spent in heated rooms, over-eating, often over-drinking, and the use of narcotics.

In women mention should also be made of a special cause of neurasthenia arising from the fact that they are the natural nurses of any case of illness which may arise in the family. Long hours in the sick-room, combined with an amount of physical exertion in waiting upon or lifting the invalid, for which they are quite unfitted, with often no sufficient sleep for weeks at a time, together with constant anxiety for the sick person's life, followed by grief for their loss if the illness terminate fatally, frequently lay the foundation for severe and long-continued neurasthenia. Perhaps this is the best place to mention frequent child-bearing, the drain of repeated lactation, and the cares of a large family with insufficient means for its support as

causes of neurasthenia in women, especially important in the hospital classes.

Again, work is often done under bad hygienic conditions. A man who is particular to a fault over the sanitary condition of his house pays little attention to that of his office, often badly lighted and ill-ventilated, in which he spends the greater part of his days.

School teachers frequently suffer from neurasthenia, and this arises not only from overwork or stuffy classrooms, but also from excessively large classes, in which case, besides the actual teaching, a great strain upon the attention is involved.

2. *Depressing Emotions.*—The influence of fear, grief, sorrow, disappointment, anxiety, and the like are all well-known causes of neurasthenia. Here again the length of time during which the cause acts is important as well as its intensity. The loss of a beloved relative is often given as the starting point of the illness, and in the case of a father's death may mean the loss of the means of subsistence. Reverses of fortune, or a fall in the social position, come under the same category.

In this connection the influence of the sudden occurrence of severe frights or shocks may be mentioned; for example, in one case the undoubted cause of neurasthenia was the sudden death of the patient's mother whilst they were sitting quietly at the fireside. These psychological

shocks are comparable in their effects to the next group.

3. *Traumatisms of all Kinds.*—It will, I think, be more convenient to consider cases of traumatic neurasthenia later with those of hysteria which own the same cause.

4. *Abuse of Stimulants and Narcotics.*—Under this head is included the habitual excessive indulgence in alcohol, tobacco, and such drugs as cocaine, morphia, and other sedatives. Probably abuse of tea and coffee acts as a contributory cause of the disease. Neurasthenia may be the result of intemperance in alcohol in former years, long after the habit itself has been given up.

5. *Infective Fevers.*—I believe that the infective fevers have more importance in producing neurasthenia than they are generally credited with. Of these influenza takes the first place, with its profoundly depressing effect upon the nervous system. One cannot but be struck, even when allowance is made for some exaggeration as to its results in the eyes of the laity, by the frequency with which influenza is given as the starting point of a breakdown in health. Next to influenza the most important and far-reaching in their effects are the various forms of septicæmia and puerperal fever. Enteric fever, especially when it occurs late in life, may leave behind it neurasthenia. Syphilis is also an occasional cause; here the effect in

producing neurasthenia is a mixed one, due partly to the influence of the disease itself, partly to the dread of its future consequences, which has often such a profoundly depressing effect upon the patient's mind, and sometimes partly to the excessive use of mercury in treatment. The evils of syphilis are often aggravated by alcoholism.

6. *Disorders of Special Organs. Abuse of the Sexual Functions.*—Sexual excess is a cause of neurasthenia in some cases, but the exact share played by it is very difficult to determine. The further discussion of this subject may be deferred until the sexual form of neurasthenia is considered. I will only say here that it is difficult to estimate accurately the part in etiology played by masturbation and other irregular sexual practices. Even if they do not directly produce neurasthenia themselves, there is no doubt that they all tend to weaken the nervous system, so that the action of other causes is rendered more easy. Further, the practice of masturbation is often begun at an early age when the nervous centres are unstable and not fully developed.

Dyspepsia and other Gastro-intestinal Disorders.—Dyspeptic affections are very frequent in neurasthenia, and by some authors have been credited with the chief share in the production of the disease. This theory would make neurasthenia merely a disease of digestion and mal-assimila-

tion, but there is no sufficient ground for so limited a view of it. Similarly, genital diseases in the male, and uterine and ovarian diseases in the female, have been regarded as the essential causes of neurasthenia. There is no doubt that some cases seem to start from diseases of this kind, but generally in persons already of neuropathic constitution, and the same statement may be made of severe gastro-intestinal disorders. Any of these diseases would aggravate or keep up a pre-existing neurasthenia.

In connection with disorders of assimilation Ebstein considers that a fair proportion of neurasthenics are sufferers from gout, which only fully declares itself later. Distinct evidence of the uric acid diathesis is not very common in neurasthenia. When the latter disease is associated with a family history of gout there is generally also evidence of a decided neuropathic tendency in the family, so that the two are probably to be regarded as the joint offspring of a common cause. A patient with such a history is likely to present neurasthenia in a severe form.

According to some writers neurasthenia is to be attributed to eyestrain, due to errors of refraction and defects in the muscular apparatus of the eyes. General experience is against the acceptance of eyestrain as a widespread or even a common cause of neurasthenia. Such refractive errors and muscular defects may play a subsidiary part in causing the disease, and may

certainly aggravate or cause some of the symptoms, but they are very rarely the sole cause, and cannot be regarded as in any sense the chief agent in its etiology. This does not mean, of course, that when present they should not be carefully corrected.

Certain organic nervous diseases, especially tabes dorsalis and spastic paraplegia, may be associated with neurasthenia. Lastly, it will be most often found that the disease is due to several of the above causes acting in combination; the etiology is rarely a simple one, and the more carefully a case is investigated the more this becomes evident.

CHAPTER XVII

DEFINITION AND NATURE OF NEURASTHENIA

THERE are many conditions which fall under the terms nervous and nervousness which are in such common use at the present day. Though we all understand what these terms imply, they are essentially vague and hardly admit of exact definition. Nervous persons are perhaps best distinguished from those not so disposed by a difference in psychical reaction to external agencies, by a tendency to exhibit psychical disturbances on what appear to be inadequate causes. The medical man from daily experience knows well that in certain of his patients trifling injuries or slight ailments will produce what seems to his judgment to be an altogether disproportionate amount of general disturbance with an unusual accompaniment of pains, and vaso-motor or other symptoms. Under nervousness is also to be recognised a want of resistance, an incapacity for sustained effort, the too early occurrence of exhaustion after exertion, either mental or physical. At the same time a large share of the

world's best work is done by persons who would come under the category of "nervous," and that acute sensitiveness to surroundings, and quick reaction to changing conditions, which are amongst the counterbalancing advantages which the nervous possess against the drawbacks of their constitution, are qualities of the highest value in civilised life, and often carry their possessors far in the path of a successful career.

It is difficult to say where the line shall be drawn to demarcate a condition of nervousness, which cannot be regarded as outside the limits of health, from that more developed state of it which is pathological, because all gradations exist between the two. Thus in dealing with hysteria and neurasthenia, conditions are met with which shade gradually off from these states towards those in which the symptoms of "nervousness" are present, but are too vague to be classified, or to be put distinctly outside the limits of physiological variation. This is more especially the case with neurasthenia and the very numerous less well-defined conditions allied to it.

In dealing with hysteria we have however seen that there are certain signs and symptoms by which we can positively affirm the presence of this neurosis, and similarly with neurasthenia we shall find that although its multitudinous symptoms appear at first sight vague and indefinite, yet certain of them recur with such constancy

and grouped together in so regular a way as to constitute a fairly well-defined disorder.

It is by no means intended to imply, however, that the current views as to hysteria and neurasthenia are final. Our knowledge of those diseases of the nervous system which are at present unconnected with any known alteration in its structure is of recent growth, and further research will doubtless separate out, more accurately distinguish, and assign to their proper causes disorders which we now group together under a too comprehensive designation, or which at present elude our understanding.

Definition.—Neurasthenia may be defined as a nervous disorder without any known alteration in organic structure, characterised by a persistent state of fatigue and hence of weakness of the central nervous system, in the absence of the causes which normally are adequate to induce such fatigue, and at the same time by a loss of control on the part of the higher nerve centres, and hence by an excessive reaction in certain directions to slight irritations. Nervous exhaustion, or nervous weakness and irritable weakness, are synonyms frequently used.

This inordinate and constant state of fatigue or weakness being the most characteristic sign of the disease, we naturally turn to inquire in what way the effects of normal fatigue are shown. Unfortunately our knowledge of this is very limited, but so far as it goes it does show that

those organs are chiefly affected in normal fatigue, physical and mental, which give rise to the predominating symptoms in neurasthenia.

Dr. A. B. Marfan¹ gives the following factors as concurring to produce the sense of fatigue after physical exertion, each helping the other, though the exact share of each one is difficult to estimate :—

1. Exhaustion of the nervous structures concerned.
2. Auto-intoxication by the products of muscular contraction.
3. Disturbances of blood-formation and of the circulation.

With regard to (1) there is experimental evidence (*e.g.* continuous stimulation by a faradic current) that nerve-fibres are difficult to fatigue, that the spinal nerve-cells are not readily fatigued, whilst on the other hand the cerebral cortical-cells are easily exhausted. There is also evidence that muscular metabolism is under the control of the brain centres ; excessive action of brain-cells accelerates dissimilation and favours the accumulation of waste products. The occurrence of (2) is well known and requires no further remark. The disorders under (3) vary in incidence and effect. Thus in any given case of fatigue, sometimes nervous weakness (*adynamia*), sometimes auto-intoxication, and sometimes asphyxia or cardiac failure predominates.

¹ *Pathologie Générale*. Bouchard. Vol. I. : Paris.

As regards brain work, and especially as to the strain involved in continuous attention ; the state of attention cannot be maintained for a long time without fatigue of brain and body, shown by a temporary excitation of the motor, respiratory, circulatory, and secretory systems, followed by a more lasting depression of all of them, with a fall in the body temperature. These changes are accompanied by a modification of the metabolism in the nervous system and in the whole organism. The urine is more abundant, and shows an increased excretion of certain constituents, especially of the chlorides and salts of calcium and magnesium, and a decrease of the sulphates, whilst the elimination of the earthy phosphates is increased and of the alkaline diminished.

The researches of Dr. Hodge have further shown that there is an alteration in the appearance of nerve-cells unduly fatigued by work or by electrical stimulation. The chief change is in the nucleus, which shrinks, has an irregular, jagged outline, and stains more deeply ; the cell body at the same time takes on a more feeble stain than normal, and becomes slightly smaller. There is thus direct evidence of change in nerve-cells as the result of fatigue, and experimental evidence that the cells of the brain most readily suffer. Further, the other systems most affected in fatigue are those to which we must attribute the leading symptoms of neurasthenia.

In a large number of cases of this disease symptoms directly referable to the brain dominate the case; in a smaller group, special symptoms, due to disturbance of other organs, are pre-eminent. Continuous overwork, especially when combined with overstrain, may then, it is reasonable to suppose, cause after a time changes, probably less intense, but comparable to those which follow on a more acutely produced fatigue, and more apt to be persistent; and on this fatigue of the higher centres ensue the disorders of the circulatory, secretory, and other systems.

It is further not an unreasonable assumption that in a patient with a previously existing *locus minoris resistentiæ* in the shape of a feeble heart or disordered stomach the symptoms due to the disturbance of these organs will ultimately dominate the clinical picture.

The control of muscular metabolism by the brain may also explain the muscular weakness which is so constant and prominent a feature of general neurasthenia. In some such way the explanation of this group of cases is to be found, and may also be applied to those cases in which emotional rather than intellectual overstrain has been at work, for the influence of depressing emotions in interfering with the secretions, and hence with digestion and assimilation, and, as a further consequence,⁴ with the general nutrition of the organism, is well recognised.

At the same time the general history of neurasthenics must lead us to admit as a primary factor in many cases what can only be expressed as an inherited tendency of their nervous systems to suffer from fatigue or exhaustion from inadequate causes. Of the exact nature of this underlying state and also of that which occurs when a similar condition is acquired as the result of the action of some poison, such as that of syphilis or influenza, nothing is certainly known.

As to secondary symptoms there is no difficulty in explaining many of them upon the hypothesis that in fatigue of the higher centres the control normally exercised by these centres over lower ones is lost, and the latter are thus enabled to enter into abnormal activity. Possibly to this unrestrained activity of lower centres, especially of those belonging to the sympathetic system and related to the innervation of the viscera, may be attributed the innumerable sensations of discomfort in the heart and abdominal organs which are so marked a feature of neurasthenia ; organs of the existence of which, so far as our sensations are concerned, we are ignorant in conditions of health.

Dr. Lowenfeld¹ considers that in neurasthenia the accumulation of waste products, the result of the activity of the central nervous system, is so great that the period of sleep is no longer sufficient to fully remove them as it is in health,

¹ *Loc. cit.*

so that a chronic overlading of the nervous system takes place. Although different parts of the nervous system may be primarily affected in different persons, yet all parts are so bound together that one centre cannot be disturbed without affecting others.

This view leads us on to the theory which regards neurasthenia as a chronic auto-intoxication. It is supposed that abnormal substances, according to some writers especially albuminoid bodies, circulate in the blood as the result of disordered metabolism, and produce a gradual poisoning of the central nervous system. Or an auto-intoxication may occur both from retention of the waste products of tissue-activity in the blood and also from the pouring into it of toxic by-products of digestion. In this way the nervous centres would be secondarily affected, and the primary source of neurasthenia be sought in a disorder of metabolism. There is perhaps not sufficient evidence to negative this view entirely, but it can hardly explain those cases in which, apart from the nervous symptoms, the organs are apparently healthy and the nutrition well maintained. For a similar reason the view that would attribute neurasthenia simply to gastro-intestinal disorders cannot be accepted ; very many neurasthenics are free from dyspeptic troubles.

The hypothesis that accounts for the largest number of cases is the one that refers neuras-

thenia to a primary disorder of the central nervous system, of a kind which, as said above, presents many analogies to the phenomena of normal fatigue. Our present knowledge, however, will not carry us over the further step of explaining the exact nature of the change. This view does not preclude us from further holding that, as a secondary result, waste products of metabolism may be retained within the body and react upon the nervous centres in a vicious circle.

Certain symptoms are best explained through vaso-motor disorders, and signs of vaso-motor disturbances are common and important in neurasthenia. According to the view just expressed these disorders are secondary features of the disease and not the primary cause of it. Some authors, however, have defined neurasthenia as a vaso-motor neurosis. Those cases in which, during good health, an attack of neurasthenia follows at once upon an unexpected shock or the fright of an accident, are the ones that, as Dana¹ points out, lend most support to the theory of a vaso-motor agency, though even here the profound effect of violent emotion on the secretions must be borne in mind.

The various symptoms which can be referred to vaso-motor disturbances will be dealt with later ; it may just be mentioned here that in a large number of observations the researches

¹ *Loc. cit.*

of Strauss¹ and Oliver² have shown that the blood-pressure is persistently raised in neurasthenia, and the latter has also demonstrated that the normal variations of the blood-pressure in correspondence with changes in the posture of the body are absent. Mention has been made of the observation of Lowenfeld on the degeneration of the vessel-walls, and probably of the cerebral vessels especially, in neurasthenics. It is possible to connect the two sets of observations, and to suppose that a long-continued high blood-pressure may lead to early vascular degeneration in neurasthenia and thus render the disease persistent.

¹ *Neurol. Ctbltt.*, xx. p. 106.

² "Blood and Blood-Pressure," London, 1901.

CHAPTER XVIII

SYMPTOMS OF NEURASTHENIA—DISORDERS REFERABLE TO THE BRAIN—INSOMNIA

It has been truly said that a physician's success in accurate diagnosis largely depends upon his power of sifting and weighing evidence, of taking note of that which is important, and neglecting the irrelevant. In no disease is this power more needed than in neurasthenia, and none offers a greater wealth of symptoms, often almost bewildering in their variety and abundance. From amongst all these, however, certain symptoms occur with such frequency and regularity as to constitute a distinct clinical syndrome, and to the practised observer almost attain the value, although derived only from the patient's own statements, of objective signs. These *cardinal symptoms*, recurring in different combinations, some predominating in one case, others in another, are pains in the head, dizziness or vertigo, mental depression, inability for mental work, various disorders of sleep, irritability of temper, weakness and tremor of the limbs, pains in the back, palpitation, certain forms of dyspepsia, and sexual weakness. These

symptoms Charcot termed the *stigmata* of neurasthenia. Their elucidation is of great aid in diagnosis.

To avoid repetition I shall first describe the symptoms due to neurasthenic disorders of the principal organs of the body, and then briefly describe the chief clinical varieties of the disease.

Types of Patients.—With regard to the clinical aspect of neurasthenic patients, there are considerable differences in their appearance and address.

1. There are those patients who bring a written description of their symptoms, either mistrusting their memory or fearing from former experience that their story will not receive full attention in every detail. This is Charcot's *l'homme aux petits papiers*; the ostensible reason for the manuscript he brings is that he does not wish to take up the physician's valuable time, and this statement is often the prelude to a detailed account of every sensation that he has had for years. Some of these patients have a good colour, are well nourished or even fat, and they are to a certain extent active. Other patients of this type are voluble, but thin, badly nourished, and look anxious and careworn: they often alternate between short periods of spasmodic or restless activity and listlessness and depression. Many of these patients go from one doctor to another; they generally think that the last one has misunderstood their case, and are often firmly convinced

that no one has ever suffered quite in the same way before.

2. A second type of patient talks more reservedly and quietly about his symptoms, is generally more or less depressed, has also the idea that is so common in neurasthenia, that his symptoms are quite unlike those of any other patient, and under his reserve appears an anxiety as to what they may portend for the future: he is grateful for advice and anxious to carry it out. Extreme forms of this type are those patients who are brought by their friends, and volunteer no information except what is elicited from them with difficulty by close questioning.

The reserve of some patients is due to the fact that they secretly attribute their disease to bad sexual habits or diseases of which they are ashamed to speak, or to some family trouble, which they do not wish to divulge.

3. Lastly there is a well-marked group of patients who complain only of one special symptom, and say that in all other respects their health is good.

Attacks of Nervousness.—Before passing to the symptoms due to the derangement of special organs brief mention must also be made of the distressing attacks of nervousness from which so many neurasthenics suffer. These come on quite suddenly and without cause, and may occur at a time when the patient is feeling fairly well. In these attacks the patient gets a feeling,

which he finds it almost impossible to describe, of sinking or faintness, generally starting from the epigastrium, or in cases where the heart is especially affected, from the præcordial region, and passing upwards to the head, with a horrible sensation in some cases of a vague, undefined fear. Sometimes the feelings start in the head, by a sense of dizziness, and are accompanied by the epigastric sensation of sinking. In either case the heart and vessels may throb violently ; there are often trembling of the legs, dryness of the mouth, flushing of the face, the patient breaks out into a more or less profuse perspiration, and may retch or have a desire to urinate or defæcate. These attacks leave a sense of weakness, and of vague fear or of dread of their recurrence. As we shall see later, the occurrence of such an attack leads by suggestion to certain peculiar disabilities. There is never of course anything approaching loss of consciousness, nor of muscular convulsions ; headache is not an infrequent sequel.

Intellectual Disorders.—Perhaps the most common cases of neurasthenia are those in which the patients chiefly complain that they can no longer do their daily mental work, that the least sustained effort to do any head-work has become impossible because it brings on headache, or feelings of discomfort in the head, or often a feeling that “ they have no brain,” or that “ they can’t think.” Efforts to work are soon desisted

from, and the patient sits or stands idly at his desk or by the fire, and neglects the work in which he formerly delighted. If any work is done at all, the task that was formerly an easy one is now got through with labour and difficulty. The least effort is a trouble, and after a time any trifling difficulty or slight worry upsets the patient altogether. The powers of concentration and of origination have departed. The work that is done is not of such good quality, the bank-clerk finds himself putting down wrong figures or making errors in his calculations, and the business-man finds that in writing a letter he has left out important words or substituted wrong ones. There is also a failure of memory to recall what has been written or said.

In the less severe cases this failure of memory, of attention, and the ready fatigue after slight mental exertion lead only to a falling off in the quality of mental work. In a more severe grade in addition to its being of inferior quality continuous work is impossible, so that the occupation is carried on fitfully and with difficulty, and in the worst forms the patient is entirely incapable of any intellectual effort.

The aphasic disorders of speech in neurasthenia require brief mention; the most important are a kind of amnesia, in which in making a long speech or in reading aloud a word or sentence is omitted, and even more frequent is a form of paraphasia, in which another word, often having

the opposite significance, is substituted for the one intended. This occurs both in speaking and reading, is partly but not wholly due to a lack of power of sustained attention, and is a source of considerable annoyance to the patient. The similar defect in writing a letter or copying a document, in which a word is left out, or a wrong one substituted, has already been mentioned. Occasionally there is stammering, or trivial words are repeated, or from a feeling of numbness in the tongue the speech may be temporarily indistinct, especially on any excitement.

Mental Depression.—Very often as an accompaniment of this intellectual incapacity, and no doubt then partly due to the sufferer's sense of failure, but also in the absence of decided changes of this kind, there is more or less marked mental depression. In all forms of neurasthenia, indeed, depression is a common feature. It may vary and occasionally pass off for a time in the milder cases, but in severe ones is constant. Like nearly all the symptoms of neurasthenia it is worse in the early morning or first part of the day, and becomes better in the evening. This aggravation of symptoms in the morning and their alleviation in the evening is a general characteristic of the disease which is often useful in diagnosis. Under this sense of depression life becomes a burden, and at times intolerable. Most men who suffer frequently

from "tedium vitæ" are, I believe, neurasthenics, although of course there are circumstances under which any man would hail release from living, as in the case of numbers of the French peasants before the Revolution. At the same time, although sufferers from neurasthenia may sometimes think of suicide, they are very rarely suicidal, and when a patient has become distinctly suicidal it may be assumed that the mental degradation has gone beyond neurasthenia.

Character.—The chief alterations in the sphere of the emotions are (1) irritability of temper, present in the early stages of the malady, so that a trifling cause leads to an altogether disproportionate outburst of anger ; (2) a tendency to worry over trifles which in health would have caused merely passing annoyance ; and (3) loss of will-power, shown by hesitation as to what course of action to pursue, and by indecision, *e.g.* a patient may come up to the doctor's door half-a-dozen times before he has courage to ring the bell. The same weakness of will is shown by fear of change, of embarking on any enterprise, or of starting on a journey, of physical discomfort, and by carelessness to maintain the personal honour or reputation. The well-known saying of Dr. Johnson, that "every man is a rascal when he is sick," is often peculiarly well exemplified in the case of neurasthenics, who frequently have no thought but for themselves,

and wrapped up in their own ailments are wholly oblivious of the interests of their belongings. In such conditions the least noise may cause an unendurable feeling of irritation. Sometimes the patient can bear no talking, and the whole household is hushed into a dismal silence; ordinary domestic operations are reduced to a minimum in order to prevent any noise that can possibly be avoided, and children are banished to a distant room. Sometimes there is marked sensitiveness to light, and the invalid lives in darkened rooms, or spends the evening hours in absolute darkness to which his relatives have to submit as best they can. The rustling of a newspaper, the click of knitting needles, the sound of a piano may be insufferable, and the whole family life may be spoilt in the vain endeavour to give such a patient ease. Another symptom of the loss of control is often increased emotionability; the formerly reserved, self-contained person may give way to fits of weeping without reason. The patients themselves are generally fully conscious of loss of control of their emotions.

The Various Forms of Morbid Fear or Uncontrollable Thoughts.—Of these, which are such a common and characteristic feature of neurasthenia, it is impossible to speak in detail. The most frequent is *agoraphobia*, in which the patient cannot cross an open space alone, but may be able to do so by walking behind another person, or by taking hold of a child's hand. This

fear of open spaces is, in my experience, often seen in patients who have suffered from vertigo, and is then due to the dread of an attack. There is sometimes an unsurmountable fear of going out-doors, so that a patient, otherwise in fair health, may go for years without ever passing his front door. Other forms are *claustrophobia*, or fear of being shut up in a room alone: the fear of being in a train, of going through a tunnel, or into an assembly of people. The latter form is most pronounced in church, so that many neurasthenics find it impossible to go to church or chapel, or if they do so sit near the door, so as to be able to leave at any moment. There are also the uncontrollable feelings of vague dread, or fear of something unknown and indescribable; "a horror of great darkness" afflicts them; fear of sudden death, of mental unsoundness, of heart disease, of syphilis, and the like. Coming under this head are the peculiar little tricks that some affect, as, for instance, walking exactly in the middle of the stones of a pavement, or touching a certain number of posts or railings like Dr. Johnson, with the so-called *délire du toucher*, so accurately described by George Borrow in the character of the literary recluse in "Lavengro." I may also mention the uncertainty that attends the performance of a simple action, as when a man goes down three or four times to see if he has really locked the front door, or goes back several times to make sure that the letter

he has just posted has actually fallen into the letter-box. Many feelings of a similar kind occur to healthy people at some time in their lives, but the normal man is able by a little resolution to overcome them; whilst on the other hand they master the neurasthenic.

More important as involving practical disability is the fear of breaking down in some part of the professional work, which especially affects such avocations as those of the priest, the barrister, schoolmaster, or lecturer. Such fears often date from a previous actual breakdown, or attack of faintness after some illness, perhaps in an illness which preceded, or was the immediate cause of, the attack of neurasthenia. The mere fact of being in the same building, under the same circumstances, and performing the same duties, is peculiarly apt by the influence of association to bring on a repetition of such an attack, and so to incapacitate the patient from his work.

Sensations in the Head.—Pains in the head are very common. The feeling of a tight band round the head, or as if a heavy helmet was pressed down upon it, the *casque neurasthénique* of Charcot is a well-known form. Next to this occipital, and then frontal or vertical headache, occur most often. The occipital headache is a dull, heavy pain which is often aggravated or brought on, if absent, by any attempt at mental exertion. These headaches are more or less constant, but are worst in the morning, im-

proving towards night. The scalp during or after headache may be intensely hyperæsthetic over the seat of pain, so that the patient cannot bear the contact of a hair-brush. Other feelings in the head (cephalic sensations of Gowers) are felt, such as sensations as if the top of the head were opening and shutting, a sense of shivering or a wave of cold over the scalp, of numbness, which the patients often describe as feeling as if "the brain were wooden," or as a feeling of "wooliness," or sensations of pressure, of dizziness, of confusion, and sometimes of a clicking, vibrating, or throbbing character.

Vertigo.—Attacks of vertigo, with sensations of falling, of staggering, of rotation or "swimming" in the head are frequently complained of. In the most severe attacks of vertigo there may be pallor, nausea, dimness of the eyes, and sometimes tinnitus aurium. Although the vertigo may be bad enough to cause the patient to cling on to some support for fear of falling, I have never known a patient to be injured by a fall from this cause, or actually to vomit ; these points, with the absence of distinct preceding of the vertigo by increasingly loud tinnitus, are distinctions from true aural vertigo. These attacks of vertigo are important, however, because if at all bad they impress the patients with a sense of being very ill, and also, as they generally come on when they are walking out-of-doors, they sometimes lead, from fear of a recurrence, to their staying indoors

altogether. Apart from attacks a more constant but less intense feeling of vertigo is occasionally a troublesome symptom. Vertigo sometimes coincides with gastro-intestinal derangements, but is not generally to be assigned to them.

Insomnia.—Of the many troubles of the neurasthenic insomnia and disordered sleep are those of which they most frequently and bitterly complain; in fact there are few patients who do not suffer from some disturbance of sleep. Although, especially in the milder cases of neurasthenia, the symptoms generally may improve in the after part of the day, until in the evening they are in comparative comfort or may even feel well, this amelioration too often ceases when they go to bed. In some cases the trouble begins directly the patients are in bed; the desired sleep does not come, and they lie awake until the small hours of the morning, when they fall into a troubled, uneasy slumber. In other cases the patient gets off to sleep soon after retiring, but wakens at 1 or 2 A.M., and then lies awake restless, and tossing about until 5 or 6 o'clock, when he gets an hour or two's sleep, to wake tired and unrefreshed; or he may wake early in the morning, and not be able to sleep again. Mental depression and fears of various kinds may appear in their worst form during the hours of wakefulness. It is not so often the actual want of sleep, though that is bad enough, which oppresses the sufferer, but painful thoughts,

gloomy forebodings, and fears of the future turn these hours into a period of acute suffering, from which he rises wholly unfitted for the duties of the ensuing day. This is not, however, the case in all patients ; some lie awake, but the mind is quiet, and more or less inactive.

On the other hand, a not infrequent complaint in neurasthenia is that the patients sleep sufficiently long, but their sleep is unrefreshing : they fall into a deep, heavy slumber, from which they awake feeling more tired than when they went to bed.

In a few cases, and these are generally adolescents, in whom hereditary influence is marked, or who have overworked at school or college, the complaint is of excessive drowsiness ; they sleep heavily, and cannot rouse themselves in the morning.

Besides insomnia various disorders occur either preceding sleep or during the night. Thus in the period preceding sleep or the *prædormitium* a state of unreasonable fear or anxiety may come on ; this may take no defined form, or may refer to some particular circumstance ; in the latter case, the patient, when just going to sleep, suddenly imagines the gas is not turned off, or that the fire in a room downstairs is not safe, or that a child is ill, and so on. In the phenomena described by Weir-Mitchell as "*Sensory-Shocks*"¹ the patient experiences a feeling

¹ "Clinical Lessons on Nervous Diseases," 1897. Chapter on Disorders of Sleep.

as of a blow upon the head, or hears a sudden loud noise, like a pistol-shot or a bell clanging, or sees a flash of light, or has a sudden sense of an odour. These sensations are sometimes preceded by an aura of a tingling or indescribable feeling rising upwards from the epigastrium or from the feet and hands. These shocks are very intense and alarming to the patients, and the fear of their occurrence may prevent sleep.

There is a phenomenon which is, I suppose, common to most persons occasionally, especially after fatigue, of a sudden start or jerk of the whole body just in the moments before loss of consciousness is complete. These starts or jerks may be very intense in neurasthenia, strong enough to throw the whole body violently upwards in the bed, and may occur many times before the patient falls off to sleep.

Another distressing nocturnal disturbance is one in which the patient suddenly awakes from sleep in a state of terror, which lasts from five minutes to half-an-hour, is attended with shivering and sweating, sometimes with violent palpitation, and followed by great prostration.

Lastly there is the condition of "waking-numbness,"¹ in which on waking it is found that the hands and arms, less commonly the feet and legs, sometimes both arms and both legs, sometimes one limb only, are the seat of tingling or of numbness, which may even amount

¹ See Weir-Mitchell, *loc. cit.*

to complete loss of sensation, when the affected limbs have to be rubbed for a longer or shorter time before sensation returns in them. More commonly the numbness is transient, and soon passes off with a feeling of tingling. In some cases the numbness is accompanied by rather severe pains in the affected limbs, and in others there is paresis, so that the hands cannot be used for some little time after waking.

CHAPTER XIX

DISORDERS OF MOTION, SENSATION, AND OF THE SPECIAL SENSES

Motor Disorders.—The most important are the general loss of power or muscular enfeeblement and speedy fatigue on exertion; this loss of power is evident by the dynamometer. All parts of the body may be affected, the patient readily becoming exhausted after any muscular effort, but undoubtedly muscular feebleness predominates in the legs in most cases, and is then often associated with pains and weakness in the back. The result may be that the patient abandons all efforts to move about and takes to the bed or the sofa. Such cases are most frequent in women. Occasionally paresis may affect one limb only, thus one of my patients complained of loss of power in his left leg, and an inclination to drag it when walking, or it may assume a hemiplegic distribution. These conditions are however rare, and are distinguished from paralysis due to organic disease by the absence of the characteristic signs of the latter.

Another uncommon motor affection is a feeling of stiffness in the limbs, which generally affects

the legs, comes on suddenly during an attempt at rapid movement, and effectually stops it. This appears to be a species of cramp. A somewhat similar form of stiffness, but occurring on waking from sleep, has been described by Weir-Mitchell.¹ Some neurasthenics find difficulty in standing on one leg, or with the feet together and the eyes closed. This, however, is never very marked, and nothing like true ataxy of gait or movement is ever present.

Tremor is very common, and takes a very fine, rapid form like that seen in exophthalmic goitre. Care should of course be observed to exclude other causes of tremor, such as alcoholism.

Fibrillary twitchings of the muscles, especially of the tongue and eyelids, rarely of the lips and small muscles of the hands, and more rarely still in other muscles, are occasionally seen. More frequent are short, quick, involuntary contractions of the muscles, occurring in a single muscle or in groups of muscles, sufficiently strong to move the thumb or a finger, and sometimes, but not usually, the whole arm or leg. These muscular contractions or spasmodic twitchings, known to the laity as "live flesh," are particularly persistent in some patients, cause them great annoyance, and form the chief trouble for which they seek advice. They generally occur in a series of contractions, followed by a short interval; one muscle or group of muscles only

¹ *Loc. cit.*

may be affected during one day or part of a day, or throughout in some persons, but generally more than one muscle is the seat of twitching at different times. The contractions do not occur during exercise, nor do they as a rule interfere with movement, but they come on directly the patient rests or sits down, and are often particularly troublesome on going to bed, and may interfere with sleep.

Reflexes.—The deep reflexes are almost invariably exaggerated, and the superficial are also active. The direct muscular irritability to a tap or to percussion is often increased, and when struck on or near their motor points the muscles may contract. Some patients when the patellar tendon is struck give a general jump or start, and are quite upset for a moment. The knee-jerk is never lost, and rarely diminished, in neurasthenia.

Disturbances of Sensation.—The hyperæsthesia that attends or follows headache has been mentioned, and similar cutaneous tenderness may follow upon pain in other parts of the body. Areas or spots of tenderness without any definite cause are met with. Pressure over a tender area may cause an acceleration of the pulse (Mannkopf's sign). Rachialgia, or tenderness and pain over the spine, is a common symptom. Pains, either dull and aching, or momentary and darting or shooting in character, the latter somewhat like but not so severe as the lightning pains

of *tabes dorsalis*, occur in the limbs and trunk. The condition known as *akinesia algera*, in which pain follows every movement, will be referred to later. Disorders of sensation are subjective in *neurasthenia*. *Paræsthesiæ* are very common, the most frequent being a sense of numbness or of tingling or pricking, like pins and needles—most commonly in the feet and legs, but also occurring in the hands and arms. The form that attends waking from sleep has been described. Patients often complain of numbness or deadness of the limbs, or say that their limbs feel too heavy or too light.

There is never any absolute *anæsthesia* ; with the possible exception that the so-called *Bernhardt's symptom* occurs in *neurasthenic* subjects occasionally. This consists of numbness, tingling or other *paræsthesiæ*, followed by *anæsthesia*, in the area of the external cutaneous nerve of the thigh on one or both sides.

The chief importance of these various *paræsthesiæ*, and of others which cannot be enumerated in detail, is the fear of oncoming paralysis, to which they give rise in the patient's mind. The various uneasy or even painful sensations associated with the action of the heart, of the stomach, intestines, and other viscera may also be referred to disturbances in the sensory nerve supply of these organs ; their functions, which in health are carried on without being felt, rise into the sphere of consciousness, and are no

doubt largely responsible for the vague sensations arising from the thorax and abdomen, to which the depressing emotions and hypochondriacal symptoms of the neurasthenic are partly to be attributed.

In connection with disordered sensation, the extreme sensitiveness to heat and cold of many persons deserves a passing notice. To cold they are especially sensitive, and it is not so very unusual for a patient to be wrapped up in several shawls, besides a superabundance of underclothing, and to sleep under an incredible number of blankets.

Disorders of the Special Senses—Eyes.—Photophobia or intolerance of all light occurs in some severe cases, and the patient in consequence lives in a darkened room. The most common affection of vision is asthenopia, visual acuity is normal or nearly so, but the eyes soon tire; there is difficulty in fixation, and on persistent fixation the object becomes indistinct, and shooting or burning pains are felt in the eye-balls, so that reading for any length of time causes the eyes to be painful. These troubles occur apart from errors of refraction, which are not infrequent in cases of neurasthenia, especially astigmatism and hypermetropia. Contraction of the visual field is not, in my experience, a sign of neurasthenia, but this point will be referred to again in connection with traumatic cases. Fatigue and consequent indistinctness of vision

may, however, appear first in the periphery of the field, and in some cases when an object is moved from the periphery towards the centre of the field, it is seen farther from the central point than when it is moved in the contrary direction. This is the reverse of the normal, and it is known as "Förster's type." The pupils may show an excessive mobility, and are very occasionally unequal; in neurasthenia this is a transitory phenomenon. Inequality of the pupils in any case should lead to caution in diagnosing neurasthenia.

Hearing, Taste, and Smell.—Hypersensitive-ness to noises, or to music, and to smells, is common enough, but other disturbance of these senses are unusual, except perhaps tinnitus aurium; this, however, generally depends on some accompanying affection of the ear itself, is a source of great distress to the patients, and aggravates their other nervous troubles.

CHAPTER XX

DISORDERS OF THE HEART AND CIRCULATION

SYMPTOMS of disorder of the heart and circulation are very frequent in neurasthenia; according to some authorities they are present in half the cases. In the majority of cases of neurasthenia the pulse is not very rapid; in a large number I found it to range between 80 and 90 beats per minute, and in very many it is not over 72. Occasionally, however, the pulse is persistently fast, and for a long time may exceed 100 or 120; in such cases, especially when there is also present a fine tremor of the limbs, the diagnosis from the "formes frustes" of exophthalmic goitre may be extremely difficult. In these patients, and also in others in whom the pulse is not persistently rapid, attacks of tachycardia occur, often after excitement or mental overstrain, during which the pulse may reach 180 to 200 per minute. It is then generally regular, but may be irregular or intermittent, or it may be irregular when slower and become regular again when beating very quickly. Attacks of this severity are, however, uncommon.

With regard to the heart itself, subjective feelings, such as oppression in the chest, pain in the præcordial region, feelings of faintness, even of expiring, of intense anxiety, and tremor cordis, are common enough, either accompanying attacks of tachycardia or palpitation, or occurring without them in the ordinary course of the disease.

From a clinical standpoint we may divide the heart-attacks of neurasthenia into: (1) attacks of cardiac pain without increased frequency of heart-beat; (2) attacks of pain with tachycardia, with, as a sub-variety, vaso-motor angina or pseudo-angina pectoris; and (3) syncopal attacks.

(1) Persistent dull, aching pain may be felt in the præcordial region, sometimes extending into the left arm. Attacks of pain also occur in which the pain is apparently very intense, shooting or stabbing in character, and may extend into both arms or into the left only. This pain is accompanied by a feeling of exhaustion or sinking, "as if the heart were going to stop," and by intense anxiety. Such attacks sometimes return regularly about the same time every day. After the attack is over the patient may break out into a profuse sweat. In this form the pulse-rate may not be hurried, and there may be no rise of tension in it; the pulse is weak, the action of the heart feeble, and sometimes irregular, or on the other hand neither may show perceptible alteration.

(2) In the second form, which is more common, the pain is accompanied by palpitation, and by tachycardia; the pulse becomes extremely rapid, but is not hard. The increased pulse-rate may last for some hours after the attack is over. The patient in a bad attack may change colour, and appear pale or somewhat grey. Often a necessity to empty the bladder is felt. No doubt in most cases the patient is restless, and feels that he must move about; and this has been rightly given as a point of distinction from true angina pectoris, but it does not always hold good, as, for instance, in the case of a young man of thirty-one, who suffered from sharp attacks of præcordial pain with palpitation, and who remained rooted to the spot unable to move until the attack had passed.

In addition to this form there are others in which the peripheral circulation seems primarily concerned—vaso-motor angina or pseudo-angina pectoris. In these cases the patient is more frequently a woman, at or about the climacteric, often plethoric and fat, with a pulse-tension more or less raised. If she is seen in the intervals the pulse-rate is generally quick, and there are milder attacks of palpitation, and breathlessness on exertion. The immediate cause of the attack is generally some muscular effort, such, for instance, as running upstairs. The attack begins with sharp pain in the præcordial region, and if the patient is seen at this time, the

extremities are cold, the pulse rapid, sometimes irregular, and both it and the heart's action are feeble. The patient may feel very ill, but there is rarely in this variety a sense of impending death. The face may appear pinched, and a little grey. The attack lasts a few seconds or minutes, and if it has been severe, as it passes off the patient may break out into a cold clammy sweat, whilst the tension of the pulse becomes relaxed. She insists on the windows and doors being thrown open, and may rush to the window for more air. A feeling of exhaustion follows, and the pulse is often rapid for some time afterwards ; the patient may or may not feel this increased rapidity of the heart's action. These attacks may be frequently repeated, and until treatment reduces the pulse-rate and lowers its tension there is a danger of their recurrence. In many cases, although there is naturally a feeling of anxiety, the sense of exhaustion and of utter weakness which follows is what the patient chiefly dreads, rather than any fear of a fatal issue.

(3) The syncopal attacks of neurasthenia are not so common. A typical case is the following which occurred in a lady of twenty-six, who had never properly recovered the strain of lactation twelve months previously. The attacks came on whilst she was out walking. She had a feeling that she must walk behind some one or she should fall. They began with violent palpitation

in the heart, dryness of the mouth, weakness in the legs, a rushing of blood to the head, and then a feeling of extreme faintness, so that she had to go into the first house and lie down. The access lasted about two hours, during which time, if she attempted to move or to sit up, she would become faint at once. After two hours the palpitation and faintness subsided.

There is a nocturnal form of cardiac attack, which is of some importance, because it is peculiarly distressing to the sufferer. Beyond the time of its occurrence it presents no special features. It is generally syncopal in character. The patient goes to sleep, but awakes in the small hours of the morning, about 1 or 2 A.M., suddenly, often trembling all over, with a pain in the left side of the chest, shooting and neuralgic in character, or dull and aching, and with more or less palpitation and tremor cordis. Accompanying these symptoms is a distressing feeling of faintness, which is increased if the patient attempts to sit up. Symptoms of vaso-motor disorder are generally present; the patient feels cold, shivers or falls into a cold sweat. There is frequently a feeling as if the heart were turning over and then going to stop which is the cause of great anxiety to the patients, and often induces a dread of impending death. No doubt such depressing feelings are favoured by the occurrence of the attack in solitude and in the dead of night. The attack may last some

minutes or as long as an hour, and after it the patient generally lies awake for some hours, the victim of gloomy forebodings, falling at last into an unrefreshing sleep disturbed by dreams, and awaking exhausted.

Syncopal Feelings.—The feeling of faintness on sitting up, or resuming the erect posture after lying down, which has been alluded to as occurring in many of these cases, is to be explained by the loss of vaso-motor tone in neurasthenia. Normally in the erect posture the blood-pressure is greater than in recumbency. Lessened output from the ventricle and slowing of heart-beat account for the fall in recumbency. In the erect posture the rise of blood-pressure in the arteries of the lower part of the body is due to the force of gravity : the same force acting on those of the upper part of the body should lower the pressure, whereas there is here also a rise, which, according to Leonard Hill's experiments, is to be attributed to the splanchnic vaso-motor mechanism whose duty it is to compensate "the simple hydrostatic effects of gravity in changes of position." Dr. Oliver¹ states that "overloading of the splanchnic veins from diminution or loss of tone in the arterioles which feed them, is a common, if not an invariable fact, in all forms of debility. When this is the case, as in neurasthenia, the effect of gravity in lowering the blood-

¹ "Blood and Blood - Pressure," by George Oliver, M.D. London, 1901.

pressure in the arteries of the upper part of the body is not, or is imperfectly, corrected, and there will be a downward drainage of blood into the spacious splanchnic veins." He also shows that in neurasthenic states the arteries may be contracted in the erect posture, that is to say, the normal postural variation of their calibre is reversed, and he thinks that in such cases the overflow of blood into the splanchnic veins is rather the result of the constriction of the systemic vessels than of loss of tone of the splanchnic arterioles. In one or other of these ways, however, there is a tendency in neurasthenia for the blood to drain into the splanchnic area, and this tendency is accentuated in the attacks which we have been describing, in which the ventricular force is weakened and the heart's action rapid and feeble. It affords an explanation for the syncopal attacks, for the sensation of faintness on getting up, or passing out of the recumbent posture, and for the pallor and coldness of the surface so often present.

It is hardly necessary to say that in these different forms of heart attack there is never loss of consciousness. Further, beyond some tenderness over the præcordial area, and frequently in women over the left breast, the disorders of sensation which are present in the hysterical forms of angina are not met with.

With regard to the physical signs, perhaps the most common modification is some accentuation

of the aortic second sound at the base, and weakness of the first sound at the apex. The position of the apex-beat, size of the heart, and character of the sounds show no changes beyond what may occur as the result of functional disturbance. During any of the attacks, especially the syncopal ones, the heart's action may be feeble, and the sounds faint. When examined in the interval between the attacks, however, the physical signs are normal, or present variations within the limits of health. If a murmur is present, it is generally systolic and at the base, the murmur commonly heard in debilitated persons. There may be a systolic murmur audible in one position only, either lying or standing, and not in the other; very occasionally it is present at the apex, and then often as a faint scratching or rough sound just internal it. The accentuation of the second sound alluded to above is most common and best marked in the cases of vasomotor angina. Cardio-pulmonary murmurs below the clavicles, and loudest during inspiration, are not infrequent, in my experience, in any of these cases.

As to diagnosis, one or two points may be briefly alluded to. In the large majority of instances the characters of the attack, the concurring symptoms, and the absence of the physical signs of organic disease, render the diagnosis clear. In hysteria the occurrence of such attacks in a young woman, with no history

of any illness likely to give rise to heart disease, and the presence of hysterical stigmata of some kind, leave no room for doubt; similarly, in a typical neurasthenic, the nature of the attacks is generally sufficiently obvious.

Taking all cases of neurasthenic cardiac disorder together, it may be said that there are no pathognomonic symptoms of the anginal attacks of neurasthenia, they are only distinguished from true angina pectoris by their lesser severity. Time is a very important factor in the diagnosis of doubtful cases. The attacks we have been considering are prone to recur, generally are very frequently repeated; this is not true of angina pectoris of organic origin, and the frequent repetition of such attacks without seriously affecting the patient's health or endangering his life, is a valuable aid to diagnosis.

The chief difficulties occur—(1) in cases in which chorea or rheumatic fever has left a slight organic lesion, which has been compensated for, and has not caused disturbance of the circulation. The complication with heart attacks due to neurasthenia or hysteria may here give rise to considerable difficulty, but in such cases the lesion will be nearly always of the mitral valve, and initial lesions are rarely attended with anginal pains or attacks, unless they are very severe, and in that case there would be decided signs of difficulty in the carrying on of the circulation.

(2) In neurasthenic heart-attacks in young men

the subjects of previous syphilis. As is well known, syphilis gives rise to aortic disease, often to an endarteritis which especially affects the aorta at its origin, just above the aortic valve. The consequences of such disease are sometimes rupture of the aorta, sometimes sudden death from failure of the heart's action without any definite cause being found at the autopsy, except the patch of aortic disease. The signs in such cases are very indefinite. They consist chiefly in accentuation of the aortic second sound, with sometimes a weak or muffled first sound, sometimes slight dilatation of the aorta, easily overlooked and difficult to make out by clinical examination.

In later life a similar difficulty may arise from atheroma in the same situation. As is well known, atheroma is capricious in distribution: it may affect the aorta and leave the peripheral arteries free, and it also appears in certain persons fairly early in life. In such cases there may be the rise of tension in the pulse, and the alteration in the heart sounds that I have given as found in vaso-motor or pseudo-angina. Obviously, in these conditions extreme care and close watching may be necessary before a positive diagnosis can be given.

CHAPTER XXI

DISORDERS OF DIGESTION

DYSPEPSIA or some form of gastro-intestinal disorder is present in a large proportion of cases of neurasthenia. Very many patients seek advice directly or chiefly on this account. Such disorders are, in the great majority, a part of the general affection, and not the direct and primary cause of it.

I am inclined to think that digestive disorders are most prominent and severe in the neurasthenia of the working classes.

Although in all cases of neurasthenia some degree of dyspepsia is common enough, the very severe forms of it are not. Many neurasthenics, and nervous persons generally, eat a great deal, and often are addicted to the frequent taking of food, because they find that the ingestion of food relieves the sinking feeling in the stomach, of which they so often complain. This excessive and over-frequent feeding, coupled with feeble powers of digestion, lays the foundation for the serious gastro-intestinal troubles that sometimes attend neurasthenia, especially when it is of some duration.

The most common form is that of flatulent dyspepsia, with acidity, a sense of weight or oppression in the epigastrium, or burning pain behind the sternum, with distension after meals, beginning in the stomach and afterwards extending to the intestines. The tongue is furred, there is a bad taste in the mouth, and there may be anorexia, but often the appetite is not much affected, though the patient may be afraid to eat, for fear of exciting pain. Flatulence is the most conspicuous symptom in such patients, who almost invariably suffer from constipation. Noisy eructation of inodorous gases is a common feature. After meals the cheeks may feel hot, and become flushed, the head feel heavy, and frequently there is palpitation. Sometimes drowsiness is a marked symptom. In this milder form of dyspepsia the patient's nutrition is unaffected, the stomach, although distended after meals, is not dilated in the intervals, whilst an examination of the gastric contents shows that the acidity is normal or only slightly deficient.

It may be said here that the statements as to the chemistry of the stomach in neurasthenia are conflicting. From this point of view the disorders of digestion may be divided into three groups: (1) the mild form above described, in which the chemical constituents of the gastric juice are normal or nearly so; (2) a more severe form, in which the secretion of HCl is decidedly

diminished, whilst the pepsin and other ferments are, as a rule, in normal amount or only occasionally diminished; and (3) a group in which the acidity is increased.

(2) This group comprises most of the cases in which gastric disorders form the most prominent feature of neurasthenia. The symptoms given above are present in a more aggravated form. In addition, in many patients a greater or less degree of dilatation of the stomach is observed. Sometimes this dilatation may be secondary to a deficiency of HCl, allowing abnormal fermentations to take place in the stomach which thereby becomes distended. There is, however, good evidence for regarding defective movements of the stomach due to muscular atony or asthenia as the primary and most important factor in many cases, and the disorders of secretion as secondary. Dilatation of the stomach in neurasthenia generally results from three factors acting in combination, namely, weakness of the muscular walls of the organ, a deficient secretion of HCl, and too large or too frequent meals. Once established, such dilatation is kept up by distension of the viscus from abnormal fermentations in the food, caused by the excessive length of time which it stays in the stomach, and also by the deficient amount of HCl present. It is not necessary to enumerate the signs of dilatation of the stomach here, but in any case of neuras-

thenia with severe gastric symptoms a careful examination for this condition should be carried out. The contents of the stomach should be withdrawn at an interval of some hours after food in order to ascertain whether the stomach can empty itself, and also at intervals of one and two hours after a test meal in order to determine the degree of acidity, for a quantitative examination of the acids present to be made, and the digestive power of the gastric juice estimated.

In the severer forms of dyspepsia, attended with dilatation of the stomach, the patients waste, lose colour, and give evidence of general malnutrition; in the worst cases there may be profound anorexia and distaste for food, and the wasting and loss of strength which ensues may even threaten danger to life.

In a small number of cases HCl may be entirely absent from the gastric juice, and this, with attendant wasting, may suggest the presence of malignant disease of the stomach. Care must always be taken not to mistake gastric dilatation, due to other causes and attended with weakness and emaciation, for that form primarily due to neurasthenia.

(3) In the third group, a much smaller one in my experience, there is "hyperchlorhydria," or an excessive secretion of hydrochloric acid. In its mildest degree this only takes place during digestion. The symptoms are epigastric pain, burning and continuous in character, with

tenderness, and regurgitation of an intensely bitter or acid fluid. There is constipation, and often pain of neuralgic character passing from the epigastrium to the lower angle of the scapula, or along the left costal margin. The general health does not as a rule suffer in this form. In the more severe degree of hyperchlorhydria, known as gastroxynsis or gastro-succorrhœa periodica, which is also occasionally met with in neurasthenia, the patient suffers at intervals of days or weeks from attacks which generally occur in the early morning before breakfast. They begin with a burning pain in the epigastrium, followed by headache, pyrosis, nausea, and often by vomiting of a considerable amount of a highly acid fluid, together with mucus. This fluid contains a high percentage of hydrochloric acid. During the attack the vomiting may occur several times in the day, and is accompanied by much thirst and great prostration.

In a third variety of hyperchlorhydria there is continuous hypersecretion of gastric juice. This occurs as a sequel either of one of the two preceding forms, or after the patient has suffered for a long time from ordinary flatulent dyspepsia, or occasionally in old-standing cases of dilatation of the stomach from the irritation of the products of fermentation of the retained food. It is always accompanied by dilatation, and leads to great loss of flesh and strength.

None of these varieties of hyperchlorhydria are nearly so common in neurasthenia as the atonic dyspepsia, with or without dilatation of the stomach, first described. Continuous hypersecretion of the gastric juice is especially of rare occurrence.

As to *intestinal* troubles, the most important are an excessive production of gas, diarrhoea, and constipation. The latter is often obstinate, and, as is well known, leads to many disorders of the general health, and, by interfering with the proper emptying of the stomach, plays a part in the production of gastric dyspepsia. Distension of the abdomen from excessive production of intestinal gases is a frequent and annoying complaint. In old-standing cases of neurasthenia the bowels cannot be moved without purgatives, attacks of diarrhoea alternate with constipation, and the large intestine sometimes becomes affected with chronic catarrh, the condition known as "mucous colitis" being set up. This is, however, only of occasional occurrence, and chiefly affects women. In this affection attacks of colicky pains in the abdomen are followed by diarrhoea in which the bowels are moved several times with a good deal of pain, and the passage of very small, hard faecal lumps coated with mucus, together with more or less mucus in masses. In pronounced cases casts of the bowel are passed consisting of albuminous material, possibly

formed by desquamation and disintegration of the superficial epithelium.

Dr. Clifford Allbutt¹ mentions "partial spasm of the colon" in association with neurasthenia, more often in cases of the melancholic variety. He says: "We find in the right iliac fossa, it may be, or in the splenic or in the sigmoid flexure of the colon, a sausage-shaped tumour having a peculiar pulpy consistence. It is usually somewhat elusive." At one visit the observer may feel sure there is "something there," at the next he is doubtful, or cannot feel it.

Lastly, the condition described by Glénard as enteroptosis is occasionally found, chiefly in women, in adult and middle life, often of delicate and slender build, in which from laxity or weakness of the abdominal walls, and of the suspensory ligaments of the viscera, there is in the erect posture a falling down of the abdominal organs, so that they occupy a lower position in the abdomen. The organs affected are generally the stomach, intestines, and kidneys, and sometimes also the liver. On inspection in the erect posture the upper part of the abdomen is flattened, the lower flabby and prominent, or even pendulous. Dyspepsia, vomiting, often hypersecretion of hydrochloric acid, and excessive pulsations of the abdominal aorta, may accompany this condition, which

¹ "System of Medicine," vol. viii., art. Neurasthenia.

from the constant dragging or other indescribable sensations it produces is well calculated to aggravate and to keep up a state of neurasthenia.

Affections of the Kidneys and Urine.—In this connection mention may be made of undue mobility of the kidneys. Moveable or floating kidney does not appear to be especially frequent in neurasthenia, but when it occurs it is likely to be the starting point or the focus of a great number and variety of nervous symptoms. There is no reason to suppose that in a neurasthenic patient, complaining of various abdominal sensations which appear to originate in a floating kidney, the latter condition has been the cause of the neurasthenia, but rather that it has given an opportunity for the localisation and accentuation of the nervous disorder in that region of the body. When the general nervous symptoms are pronounced an operation for fixing the kidney should only be undertaken after careful consideration of the whole state, as it is in these cases that operation often fails to give any relief. Some of these patients suffer from irritability of the bladder, with increased frequency of micturition, and sometimes complain of difficulty of micturition.

The condition of the urine in neurasthenia is variable; in many cases it is pale, with a low specific gravity, and contains an excessive amount of phosphates. Oxaluria is

rather frequent. Cases attended with much dyspepsia may present a urine deficient in quantity and loaded with urates. According to some authors there is an excess of uric acid in neurasthenia, and the proportion of uric acid to urea is increased above the normal. Albumin is very occasionally present ; according to Dana (*loc. cit.*), once in a hundred cases. I have found a trace of albumin very rarely, in less than the above percentage, and the albumin was never present in more than a trace, and casts or other evidence of organic kidney disease were entirely absent. Sometimes a transitory glycosuria is met with.

CHAPTER XXII

CLINICAL VARIETIES OF NEURASTHENIA

THE symptoms which occur in neurasthenia are thus very numerous, but it is not of course to be supposed that they are all present in one and the same case ; and in practice it is found that there are certain well-marked forms or types of the disease, in which the symptoms referable to one organ or set of organs predominate, and give each form its special characters. These different types will now receive brief consideration, without recapitulating in detail the symptoms which have already been described, and without unduly multiplying the varieties, by which the subject may easily be made, and in some instances has been made, unnecessarily complicated.

It is also to be borne in mind that in neurasthenia the course of the disease shows periods of remission, or rather intervals in which the symptoms are comparatively mild : these intervals of comparative health are most marked, as would be expected, in the milder cases.

With regard to the different clinical forms,

neurasthenia in women and in adolescents presents some special features.

In adolescents the hereditary form of the disease is most marked. It thus often appears without any distinct cause except a bad nervous inheritance. Such persons are often of good intellectual powers, but break down under any strain. Evidence of a weak nervous constitution is often present in childhood, in the shape of headache, migraine, infantile convulsions, night-terrors, somnambulism, and muscular spasms or twitchings. There are no pathognomonic signs of the hereditary form, but mental symptoms predominate, fixed or uncontrollable ideas and morbid fears being especially frequent and persistent. Symptoms of sexual disorder are sometimes prominent in such cases.

In women neurasthenia is apt to be associated with hysteria—hystero-neurasthenia—and especially so in young women. In older women neurasthenia in the poorer classes is frequently associated with child-bearing and the bringing up of a large family on insufficient means, and in women of all classes with their duties as the natural nurses of sick relatives. Women also provide the largest number of cases, irrespective of the cause of the disease, in which from an extreme degree of muscular weakness, the patients become bed-ridden, or simply go from their bed to a couch, passing their days in one or two rooms. The

causes which have most often brought them to this mode of life are either pains in the back or limbs on exertion together with an overmastering sense of weariness, or palpitation, or attacks of pseudo-angina pectoris, or of vertigo, or some gastro-intestinal affection.

After some time spent in this invalid existence they seem to really lack the will-power to make the effort to return to ordinary life, and gradually they may practically cease from all occupation, even from reading or needlework. They may become thin and wasted from loss of appetite, but on the other hand often take food well and grow fat. In such cases of fat neurasthenics, who have remained at rest for a long time, fatty infiltration of the heart after a while may be the cause of real difficulty in moving about, by giving rise to shortness of breath and to faintness on any exertion.

According to the chief symptoms present neurasthenia may be divided into the following groups or types, which are entirely clinical, and merely indicate the incidence of the disease according to the individual conditions present: (1) general or cerebro-spinal; (2) cerebral; (3) spinal; (4) cardiac; (5) gastro-intestinal; (6) sexual. In making these divisions it is not intended to imply that the disease only affects, for instance, the brain in (2) or the heart in (4), but rather that the symptoms referred to these organs predominate. Other symptoms of neur-

asthenia are present at the same time, but fall into the background.

(1) *General or Cerebro-spinal Form.*—This comprises the largest number of cases of neurasthenia, and the patients complain in a greater or less degree of most of the symptoms which have been already described. The cardinal symptoms of the disease are, of course, the most constant; *i.e.* headache, vertigo, inaptitude for mental work, mental depression, anxiety, morbid fears, insomnia, muscular fatigue, emotional excitability, neuralgic pains, palpitation, and dyspepsia.

Both the mild forms of neurasthenia and some of the most severe belong to this variety; it is hardly necessary to describe it further here, for all the symptoms which belong to the disease are represented in varying degree in different patients. The characteristic of the group is the absence of any evidence that the brunt of the disease has fallen especially upon one organ. Perhaps the general symptom of muscular weakness, as shown by too ready fatigue in the milder, and total incapacity for any exertion in the severer, cases, is the most marked feature.

(2) *The Cerebral Form.*—This form approaches most nearly to the preceding, but in it the general symptoms are thrown into the background by the cerebral ones. In these cases those symptoms which have been described as affecting the intellectual and emotional spheres

are marked. It is needless to recapitulate them. In many cases of this kind the physical condition and muscular strength may appear unimpaired; the patient may be even capable of prolonged physical exertion. In such patients the robust frame and healthy complexion contrast strangely with the nervous fears, the total inability for even slight mental exertion, and often emotional excitability of which they complain. Farmers and countrymen who live in the open air, when they suffer from neurasthenia, sometimes present this form of it. On the other hand many patients belonging to this group present the more ordinary worn, thin, and anxious appearance of neurasthenia.

The symptoms vary very much in the relative proportion in which psychical anomalies of will, or idea, or symptoms of cerebral exhaustion, *e.g.* inability for mental work, or signs of increased emotional excitability, of depression or melancholy are respectively present. Affections of will and idea may occur without much evidence of emotional change, or the latter with feebleness of will may be the chief feature, with only slight loss of the power of intellectual work.

(3) *The Spinal Form, Myelasthenia*, corresponds to the "spinal irritation" of the old descriptions. The two chief symptoms in this form are: (1) pains in the back, often radiating into the limbs, and (2) weakness of the limbs, especially of the legs. The pains are dull, heavy

or aching in character, with tenderness over the spinal column, and in the vertebral grooves. The chief seats of pain or tenderness are in the upper dorsal spine, between the shoulders, and in the lumbar region. The weakness is most frequent in the legs, but in some cases chiefly affects the arms. Various paræsthesiæ are often felt in the legs, such as numbness, tingling, pricking, or a sensation as if cold water were trickling down them. Tremor in the legs, and a feeling of giving way at the knees, are common, especially on any anxiety, emotion, or shock. The pains and sensation of weariness or dragging of the limbs are increased on any exertion, and the patient sometimes gives up all exercise, ceases to walk, and takes to bed, where she—for this form of neurasthenia is most common in women—may remain for long periods.

(4 and 5) *The Cardiac and Gastro-intestinal Forms* need no special description as they are simply due to the predominance of cardiac or vasomotor and dyspeptic disorders.

(6) *Sexual Form.*—There is considerable variation in the state of the sexual functions in neurasthenia; loss of sexual desire and impotence are very frequent complaints when the disease attains any severity. Rarely the sexual powers remain unimpaired.

Short of impotence, there are various disturbances of the act of sexual connection; ejaculation takes place too early, or erection is not

produced or ceases when the physiological act is about to be performed. Frequent nocturnal emissions are a common and troublesome complication.

Such symptoms may all occur as part and parcel of an ordinary neurasthenia, and vary according to the varying condition of health of the patients; even disappearing to return with any exacerbation of the malady. The presence of these symptoms cannot be regarded as constituting a case of the sexual form. At the other end of the scale there are cases which actually originate from sexual causes and yet do not present the sexual form of the disease, but only show general symptoms.

Neurasthenia is only to be considered of sexual origin when disturbances of the sexual functions constitute the chief ascertainable cause of the illness.

It is a matter of common knowledge that neurasthenic patients frequently attribute their illness to sexual disorders, and especially to the practice of masturbation in youth. In many such instances, however, the baneful habit has never been carried to great excess, and often has not been indulged in for many years previous to the time when the patient comes under observation; in any such case, this view of the origin of the disease can only be accepted with great caution.

The influence of masturbation may easily be

exaggerated, because neurasthenic patients are especially apt to attribute their illness to its bad effects. In such cases it is important, though this is often no easy task, to reassure the patient's mind on this point. Where the practice has been more recently abandoned it may be well to tell him that if he perseveres in his good resolutions he will experience no further consequences from his folly. In some cases abnormal tendencies of this sort must be regarded as evidence of an inherited neuropathic taint.

It is quite otherwise where such practices are continued for years and into adult life. The morbid state of nervous erethism which they produce, the sense of shame and degradation, and the fear of discovery must induce a constant wearing influence on the central nervous system well calculated to induce neurasthenia. Further, various irregular practices such as *coitus reservatus* adopted in married life to avoid children can, I believe, be causes of the disease. In addition to their directly harmful effect upon the nervous system, they are injurious by weakening the power of control over the sexual functions, and by removing the natural hindrances to excessive sexual indulgence. Simple sexual excess, whether in irregular connection or in married life, is an occasional cause, as also are some of the chronic disorders of the sexual organs which may result from gonorrhœa.

Nocturnal pollutions, when frequent, besides

the mental worry and anxiety they cause, have an undoubtedly exhausting effect on the nervous centres. Another symptom which is often the source of great disquiet to patients is the passage from the urethra at the end of micturition, or even more commonly during defæcation, especially if there is constipation, of a little slimy mucus, which generally consists of secretion from the prostate or prostatic urethra. The passage of this secretion may be accompanied by a marked sense of weakness or exhaustion, and followed by aching pains in the back. The urine should always be carefully examined in such cases, and the deposit after centrifugalisation investigated under the microscope. The patient is nearly always morbidly anxious as to whether he is losing semen, and a reassurance on this point is often of great value to his health.

The sexual centres are peculiar in the way that their functions, although so intimately bound up with the whole central nervous system, may be disordered even to complete impotence, without other nervous centres becoming affected, and therefore with the due performance of physical and mental activities. In the majority of cases of this kind, however, the signs of general neurasthenia are present, especially pains in the back and limbs, lassitude, and weakness. In addition to the symptoms of sexual disorder above described, in bad cases erection and emission may occur even in the daytime from erotic

thoughts, the sight of women, or the jolting of a carriage. Further, besides the pains in the lower part of the back and in the thighs, there is sometimes coccygodynia, and various sensations at the neck of the bladder, such as a feeling of constant desire to pass water, of a fluid trickling away in that region, of sensations of cold water running down the back of the thighs and calves of the legs, of numbness and tingling of the feet, and so on.

An important feature in most sexual cases is the mental distress and anxiety which the patients suffer with regard to the nature of their symptoms. The worst cases are perhaps especially prone to pass into the miserable state of the sexual hypochondriac, or occasionally to fall into melancholia.

With regard to their general bearing there are two classes of sexual neurasthenics, the one shamefaced, shy, and ashamed to speak of their symptoms, the others only too ready to give them in full detail. In investigating a case of neurasthenia it is very often necessary for the proper understanding and treatment of the patient to inquire as to the state of the sexual functions, but after the required information has been obtained, and frequently it is only fully given later in the course of treatment after the patient's confidence has been gained, it is not advisable, but quite the contrary, to discuss symptoms of this nature, or in any way to direct the patient's attention to them.

Other Clinical Types.—Two neuroses which approach most nearly to neurasthenia, although the position of the first in nosology is perhaps doubtful, may be briefly mentioned. The first is the condition originally described by Möbins as “akinesia algera.” The chief feature is loss or abandonment of voluntary movement on account of its causing pain, in the absence of any reason which can be discovered for it. The affection occurs in persons with a strong neuropathic tendency, both family and personal. Only the movement at the larger joints are painful at first, later nearly every movement gives rise to pain. The pain accompanies and succeeds movement, and is not confined to the parts actually moved. After any over-excitement a condition of nervous weakness develops. Finally there is complete loss of power, in which the limbs become paralysed and helpless. In addition, signs of general neurasthenia, such as insomnia, incapacity for mental exertion, pains and pressure in the head, neuralgia, and weakness of the voice are present.

The second is that known as the “Anxiety Neurosis.” This affection is characterised by (1) over-excitability or excessive emotionalism; (2) a constant state of anxious foreboding; (3) paroxysms of anxiety with dyspnoea, palpitation, and profuse sweats; (4) rudimentary attacks of a similar kind, fainting attacks, paræsthesiæ, disorders of the heart, respira-

tion, and digestion ; and (5) various morbid fears and uncontrollable feelings. The most constant and striking feature is the morbid state of intense anxiety. The other symptoms are present in varying degree and combination. Sometimes the morbid anxiety is bound up with one particular fear in the patient's mind. The affection is always associated with mental depression. The patient may have a fear of sudden death ; she may be afraid that when she goes out for a walk she will not return alive, or that she cannot live throughout the day. She is constantly visiting her doctor or sending urgent messages for him in order that he may reassure her on the special point as to which she is afraid. Reassured for a time, she shortly relapses into the same dread. Dr. Dana (*loc. cit.*) observes of these cases that "the condition is not one, strictly speaking, of hypochondriasis, for the emotional disturbance is much stronger and more dominant than the intellectual one. The patient quite appreciates the unreasonableness of her foreboding, and in her mind believes the promises of her physician, . . . but there is, despite all this, a distress which destroys her peace of mind and makes her nervous, sleepless, and in every way neurasthenic."

CHAPTER XXIII

TRAUMATIC HYSTERIA AND NEURASTHENIA

TRAUMATIC NEUROSIS. RAILWAY BRAIN. RAILWAY SPINE

It seems more convenient to consider traumatic hysteria and neurasthenia together, because they own a common cause, and run a somewhat characteristic course, although such cases do not differ essentially from those due to other causes.

The fact that such symptoms might arise after injury came into general notice from observation of the effects of railway accidents. Under the name of "railway spine" they were ascribed by Erichsen, who was followed by many others, to superficial lesions of the cord and meninges (1866). Some years later the brain was considered to be the primary seat of the functional troubles, and "railway brain" replaced "railway spine." The share of the brain in the symptoms was clearly brought out in Page's work (1882-85), and hysteria and neurasthenia recognised as the principal factors of the condition. Walton and Putnam in America also pointed out

the similarity between these cases and those of recognised hysteria.

About the same time Charcot showed that hysteria is often provoked by traumatism, and that the nervous symptoms in traumatic cases are identical with those seen in hysteria arising from other causes.

In Germany, where the discussion took rather a different form, Oppenheim and Thomsen brought forward the view that in these cases there was a special neurosis, which they termed the "traumatic neurosis," and in a modified form the hypothesis of a distinct traumatic neurosis was upheld by Strümpell.

The term traumatic neurosis has been proposed for cases of this nature, but its use is not to be recommended. It is too vague, and rather tends to give ambiguity than clearness. The use of such a term is also a hindrance to the further differentiation of the different varieties of nervous disorder which it no doubt covers. Both hysteria and neurasthenia are common as the result of traumatism, and these disorders will alone be considered here.

It is possible that in some cases which are regarded as purely functional nervous disorders from traumatism, as examples of hysteria and neurasthenia, there may be slight anatomical lesions, minute ecchymoses, blood extravasations or bruising, as part of the "commotion" of the brain and cord from the accident. Such a

question is obviously impossible to settle with our present knowledge, and although of theoretical interest as regards the mode of production of these disorders, is perhaps not of present practical importance; for if such lesions are present, they are not sufficiently intense to give rise to the signs by which we recognise the existence of organic lesions, the symptoms in these cases being analogous to those of hysteria and neurasthenia of other origin.

With regard to the frequency of hysteria and neurasthenia respectively after injuries, Knapp,¹ out of 200 cases of various nervous disorders following injury, classed 70 as hysteria, and 50 as neurasthenia, or 60 per cent. of the whole.

The nature and severity of the accident in such cases vary. Hysteria and neurasthenia may both appear either as the result of a slight or of a severe accident. It is now established that what may be almost described as a trivial incident, such as a slight fall, or a blow on the head of no great severity, may give rise to these disorders, and consequently that the apparently slight nature of the accident does not in itself afford ground for the suspicion of malingering.

Although a slight and purely personal accident may be the starting point of hysteria or neurasthenia, this is not the usual course of events. These disorders generally supervene on some

¹ "Traumatic Neurasthenia and Hysteria," Brain, 1897.

greater catastrophe, which is attended with features of overwhelming horror, involves many persons, is of a sudden and unexpected character, and on such a scale as to bring home to the victims the utter helplessness of their position. A severe railway accident, as Page well points out,¹ more than fulfils all these conditions. The appalling suddenness of its occurrence, the sense of physical helplessness, the terrifying noise of the crash, the shrieks or groans of the injured, all combine, especially if it happens during the night or in a tunnel, to produce an overpowering impression of terror. Add to this the pain and shock of the physical injury, more or less severe, which is simultaneously incurred.

Hysteria and neurasthenia commonly result therefore from an accident attended with nervous shock, which is well calculated to cause as subsequent effect the nervous symptoms of these diseases, and a very important part in the production of such symptoms is to be ascribed to the psychical effects of terror or fear.

Whilst laying stress upon the importance of the psychical factor in these cases, the influence of the physical injury must not be left out. This undoubtedly plays a very important part, and in hysteria especially often determines the seat of the subsequent disorders. Other influences help in many instances. That of litigation in the effort to obtain compensation for injuries is

¹ "Railway Injuries," p. 28. London, 1891.

especially to be noticed. The delay and uncertainty involved in a long and tedious law-suit for damages cannot fail to have a prejudicial influence on any case. It is no doubt a frequent cause of retarded recovery. Not uncommonly all treatment is postponed until after the legal decision has been given. This practice naturally arises from the desire of the patients and their friends not to run the risk of losing any part of what they regard as their just due. From a medical point of view, however, such a course cannot be too strongly deprecated in the interests of the complete recovery of the patient. The evil effect of delay in the treatment of hysterical symptoms has already been insisted upon.

The question of litigation raises the very important point as to how far the symptoms of traumatic hysteria and neurasthenia are due to anxiety to obtain compensation. Very opposite opinions are held on this point. Knapp's (*loc. cit.*) observations led him to the conclusion that there were no striking differences in the symptoms in litigation and non-litigation cases, and that the non-litigation cases of hysteria, but not of neurasthenia, were less severe and took a more favourable course. It may be said shortly, with regard to the influence of litigation, that, apart of course from cases recognised as deliberate malingering to obtain damages, it tends to aggravate the symptoms, often perhaps by an unconscious influence over the patient's mind,

but cannot be considered as in any way the cause of them.

Traumatic hysteria may appear in an acute form, which is usually transitory, and occurs immediately after the accident, consisting of a convulsive outburst of loud crying, sobbing, shrieking, or other emotional disturbance, or in severe cases of an hysterical fit, or series of fits.

The non-paroxysmal symptoms of hysteria may follow at once upon the accident, but more generally only appear after the lapse of a longer or shorter interval. In this interval the patient often sleeps badly, and has terrifying dreams, in which the events of the accident are repeated.

The symptoms of traumatic hysteria are identical with those which are met with in cases due to other causes, and have been sufficiently described above. The most frequent symptoms are paralyses, in the form of paraplegia, or of a monoplegia, less often of hemiplegia, contractions of the limbs, various forms of anæsthesia, contraction of the fields of vision, pains, especially in the back, areas of hyperæsthesia, especially over the vertebral spines, and according to Benedikt, tropho-neurotic disorders.

In traumatic hysterical paralysis the influence of suggestion can frequently be traced, as was first observed by Charcot. He clearly pointed out the similarity between the symptoms of paraly-

sis in the hypnotic state and those of traumatic hysteria, and considered that both were due to the influence of suggestion. In the one case the action of the higher psychical centres is temporarily annulled by hypnotism, in the other by the influence of the "nervous shock" of an accident, which, by inducing a state of fright or terror, produces a similar effect. In this condition of suppression of the higher centres an injury to a limb may give rise by a kind of "auto-suggestion" to paralysis, or instead of paralysis, to a spasmodic contraction, of it.

In the diagnosis from neurasthenia the presence of hysterical stigmata is to be taken as evidence of the hysterical nature of the case, but it should be added that it is especially in these traumatic cases that a combination of the two diseases is most common; and that undoubted hysterical symptoms are found associated with neurasthenia (hystero-neurasthenia). Further, the hysterical stigmata may be present at one period in the illness and not at another; they may appear soon after the accident and then subside, or may only occur late in the case. Thus, according to the period at which the patient is examined, very different views of the nature of the illness may be taken, and this is undoubtedly one reason for the frequent discrepancy between the opinions given by different observers in traumatic cases.

Certain symptoms are common to both hysteria and neurasthenia in these cases, such as irrita-

bility of temper, confusion of mind, failure of memory, vertigo, headache, insomnia, muscular asthenia, ready fatigue on any exertion, pains in the back and limbs, various paræsthesia, anorexia, dyspepsia, and sometimes vomiting.

In *traumatic neurasthenia* the symptoms may come on

(1) Acutely, immediately after the accident.

Or (2) in a chronic form, after an interval of days or sometimes even weeks.

In the acute form there is at first a state of nervous collapse, with a rapid, weak, and often irregular pulse. During the days immediately following the accident the patient may be dazed, and inattentive to his surroundings, or more commonly is in a state of restlessness and unnatural excitement. There is incapacity for mental exertion of any kind, and the attempt brings on, or aggravates, headache. Sleep is fitful and broken, and disturbed by distressing dreams. Other symptoms which may be present are muscular weakness, with tremor of the limbs, palpitation, feelings of sinking, or exhaustion, a small, quick, sometimes irregular and intermittent pulse, anorexia, sometimes vomiting, dyspeptic disturbances, sweating and loss of flesh. Professor Horsley¹ also gives a rise of temperature without other signs of pyrexia as a feature of acute cases. The patient is irritable, cannot bear

¹ Allbutt's "System of Medicine," vol. viii., art. Traumatic Neurasthenia.

the least noise, and dislikes a bright light. Defect of memory for the events of the accident is common; the patient remembers no detail of it, or sometimes gives in good faith a totally erroneous and imaginative account of what has occurred. This acute condition may subside, or gradually pass into the next form.

In this, the more chronic form, there is often an interval after the accident before the symptoms become evident. This interval may be a few days to a week, or it is said even some weeks. The interval is more apparent than real, as in the majority of cases careful observation shows some departure from the normal, especially in the intellectual and emotional spheres, from the time of the accident. These symptoms gradually develop, the patient first noticing that he is no longer capable of the same brain work, or is unduly depressed or excited.

To enumerate briefly the chief symptoms of which more or fewer are present in chronic traumatic neurasthenia, the psychical ones are generally the most marked, and comprise loss of memory, loss of the power of attention, melancholy or depression, apathy, indifference, irascibility, emotional excitability, headache, of some one of the kinds already described as present in neurasthenia, and vertigo; all increased by emotion, mental work, and alcohol, which latter the patient often finds affects him much more readily than before. Insomnia, distressing dreams, or

morbid nocturnal fears, are present as in the acute form. There are various paræsthesia or subjective sensations in the limbs, but not anæsthesia.

In the domain of special sense, there are tinnitus aurium, sometimes deafness, morbid sensitiveness to light and noise, and asthenopia. General loss of power, giving rise to a slow, feeble, even tottering gait, muscular twitchings and tremor are often present. The pulse is quick, often irregular, and various vasomotor disturbances occur. In a few cases the pulse is unduly slow. There may be polyuria or transient glycosuria.

Mannkopf's test, increased rapidity of the pulse when pressure is made upon a tender part, can frequently be obtained. The deep reflexes are generally exaggerated.

The above symptoms, with the history of the case, afford a somewhat distinct clinical variety of neurasthenia, and a further point of distinction from other forms lies in its more acute origin. In some cases, however, in which the statement is made that the patient's health was quite good before the accident, careful inquiry elicits signs incompatible with perfect health, and although it is true that, as stated above, the resulting neurasthenia is not proportional to the severity of the accident or injury, yet in those cases in which neurasthenia follows upon a slight personal accident, unattended with circumstances

which provoke terror, I think it will rarely be found that the patient's health was altogether satisfactory for some time antecedent to the accident. In traumatic cases, as in others, a strong hereditary tendency is unfavourable in prognosis.

Two symptoms deserve perhaps further notice, the one is the occurrence of vomiting, which occasionally takes an obstinate form, and the other the intermittent muscular spasms or jerkings, which are not at all infrequent, and constitute a striking feature in some cases. In one example which came under my notice, the patient's body and limbs were constantly agitated, except during sleep, by muscular spasms resembling those of paramyoclonus, and this condition lasted for two years.

CHAPTER XXIV

COURSE, PROGNOSIS, AND DIAGNOSIS OF NEURASTHENIA

NEURASTHENIA runs no fixed course, but shows great variability in its mode of progression. In individual cases the course will vary with the cause, surrounding circumstances, and general conditions present. There is an uncommon form, in which the disease comes on suddenly, runs an acute course, and under favourable conditions the patient rapidly regains health. Neurasthenia is, however, essentially a chronic disease, with a gradual onset, the result of the culmination of causes acting over a considerable period, and recovery takes place equally slowly. It must not be supposed that the progress of the disease is a uniform one, as considerable remissions occur from time to time. There is also variation in the actual symptoms present, one set of symptoms being prominent at one period of the disease, to be replaced later by a fresh group. When certain symptoms have disappeared, they may return without apparent cause. The progress to recovery takes place by a series of upward stages. There is marked improvement for a time, and then, without any assignable

reason, the patient falls back or undergoes a period of relapse, but starts again on a higher plane for a fresh period of progress towards convalescence, perhaps to be thrown back several times, but gradually attaining each time a higher level of health. These relapses, when recovery is apparently proceeding well, are extremely trying to the patient, and a severe test of his patience and fortitude.

Neurasthenia does not involve danger to life, nor does it curtail the length of days in the majority of instances. It does, however, seriously interfere with usefulness and activity. In many cases the daily work is rather interfered with than altogether prevented. In these milder forms a certain measure of activity is compassed, but at greater cost, and under conditions of health which take the interest out of work, and all zest from the daily occupation. In more severe cases work is impossible, and as neurasthenia is a disease of the active period of life, the time lost often cannot be regained. The best years of a man's life may have to be passed in a carefully restricted activity, which effectually prevents the full exercise of his mental gifts, and mars his career.

As a general rule, neurasthenia is capable of great amelioration, or cure by suitable treatment. The patient has, however, to learn by experience, and so to limit his energies as to keep within the margin of his strength ; the painful experience of

an attack is of value in this way, in enabling him to avoid the causes of a relapse. In saying that neurasthenia is capable of cure, it should be added that the prognosis depends, more than in most diseases, on the patient's circumstances and surroundings.

The effective forms of treatment, besides more or less lengthy abstinence from work, generally involve measures which are expensive, and may be beyond the patient's means. It may not be possible to alter the conditions under which the disease has arisen. If a man is driven by necessity to continue in an occupation which makes demands beyond his strength, or is a source of perpetual anxiety to him, or if a woman is unable to be freed from harassing domestic cares, it is obvious that there can be no great prospect of relief. On the other hand, a cure may be anticipated if better conditions of life can be secured. In cases of marked hereditary neurasthenia, although improvement may be secured, an absolute cure is hardly to be looked for : the disease is the expression of a constitutional and ineradicable taint. Cases of long duration are also of bad prognosis : length of standing is in this respect more important than intensity of symptoms, though here again much depends upon the extent to which the surroundings can be altered. Again, the prognosis is unfavourable in persistent insomnia and when sexual troubles are prominent.

Neurasthenia may pass into melancholia, into chronic invalidism, sometimes difficult to distinguish from malingering, or be the origin of habits of morphinism, alcoholism, or other drug taking.

Though neurasthenia often complicates other nervous diseases of organic origin, such as tabes dorsalis, the early stages of general paralysis, &c., there is no reason to suppose that it leads to organic nervous disease, except that it does appear in some cases to be followed by early degeneration of the arteries, and thus leads to imperfect nutrition of the brain.

Diagnosis.—The symptoms which have been given are sufficiently distinctive of the disease, and constitute well-marked clinical groups.

From hysteria the diagnosis will be made on the grounds already given, and from the characteristic features, especially the “stigmata,” of that disorder. It must be remembered, however, that cases of hysteroneurasthenia, in which there is a combination of some of the symptoms of the two diseases, are not infrequent. There is, however, no difficulty in recognising in such a case the symptoms due to hysteria, *e.g.* hemianæsthesia, anæsthesias, paralyses, or contractures and convulsions.

With regard to mental symptoms, though there is failure of intellectual capacity and of memory in neurasthenia, there are no delusions nor hallucinations, and the morbid fears or uncontrollable

ideas do not falsify the ordinary perceptions. Melancholia, which in a mild form may simulate neurasthenia, is distinguished from it by delusions with extreme mental depression.

Hypochondriasis, the diagnosis of which from neurasthenia sometimes presents some difficulty, and into which the sufferers from the latter disease in its later stages sometimes drift, is distinguished by the presence of a fixed delusive idea as to the existence of some disease or bodily ailment. The ordinary stigmata of neurasthenia are absent, and the patient is capable of more exertion than a neurasthenic.

In the early stages of some cases of general paralysis the symptoms of which the patient complains are those of neurasthenia, and on this account an error in diagnosis of the most serious kind is possible. But in general paralysis other signs of organic disease are present, such as unequal pupils, reflex immobility of the pupils, exaggerated reflexes, or the opposite condition of an absent knee-jerk, marked tremor of the lips and tongue, often also of the hands, characteristic alteration in speech, and expansiveness of ideas.

From other diseases of the nervous system neurasthenia is distinguished by the absence of any complete or persistent paralysis of the limbs or of the cranial nerves, of alterations in the state of the reflexes, or of the pupils, and of any sign which positively denotes organic disease.

In some cases of neurasthenia headache is persistent and severe, and may give rise to suspicions of coarse brain disease, *e.g.*, tumour or chronic meningitis. The converse error is perhaps even more probable when an intracranial tumour coexists with signs of neurasthenia and the latter condition only is diagnosed. Such a mistake should be carefully guarded against by a thorough examination which will, except in rare cases, reveal some sign incompatible with the existence of functional disease alone. The cases in which mistake might occur are those in which a tumour is situated in the so-called "silent areas" of the brain and in which optic neuritis is at the same time absent. It is only, however, in very exceptional cases that the neurasthenic headache is sufficiently constant and intense to give rise to difficulty.

Many organic diseases of the viscera produce in nervous persons a secondary condition of weakness akin to that of neurasthenia, but in most cases the true nature and source of the nervous troubles can be recognised. Such cases are not to be properly included under neurasthenia proper: the difficulty of distinction is perhaps greatest in some obscure abdominal diseases, but the condition here generally more nearly comes to resemble hypochondriasis than neurasthenia.

CHAPTER XXV

TREATMENT OF NEURASTHENIA

Preventive Treatment.—In children of neurotic inheritance the same observations apply that have already been made in the case of hysteria, and need not be here repeated. Such children should be brought up to abstain from alcohol, and to be sparing in the use of tea and coffee. For youths who are destined for professions which involve brain-work, care of the body and a sound physical training, until physical development is completed, are essential ; there should be a due proportion of leisure, largely to be spent in open-air exercises, so that they may start on their career with a reserve fund of good physical health. Such a bodily training is equally necessary for girls, especially for those who are to be engaged in teaching or similar pursuits, and with the more enlightened system of education of the present day they are fortunately able to obtain it.

When the life's occupation is entered upon, to maintain the nervous system in a healthy state under the strain of modern competition, these habits of out-door exercises must still be

kept up, so that sufficient time is reserved for rest and recuperation.

For the unfortunate sufferers from hereditary neurasthenia, when the first signs of the disease appear in youth, the regulation of the whole life requires to be carefully considered, and their future adapted to the work they are likely to be able to perform. Many of these cases are unable to undertake work which involves responsibility, or in which there are times of special strain. The most suitable occupation for them, and indeed for many other neurasthenics, is one in which there is a fixed salary, without much responsibility, and fixed hours of work of not excessive duration. After a break-down in early life, a more ambitious career has often to be sacrificed for an occupation of this kind.

Treatment.—In cases of acute neurasthenia, arising from a severe nervous shock, grief, or anxiety, and in cases of acute traumatic neurasthenia, the essential treatment is absolute rest. The patient should be kept in bed, and as the special senses are often hypersensitive, the room should be darkened, and kept as quiet as possible. The patient should not be allowed to read or to undertake any mental exertion, absolute rest of mind and body being aimed at. The diet should be light and easy of digestion, as the digestive organs are very often disturbed, but at the same time should contain

abundance of nutriment. The bowels must be carefully regulated. It is better in most cases to engage an experienced nurse to look after the patient. Isolation is not necessary at first in acute cases, but visits from relations should be short and few in number. If the patient does not, however, soon begin to improve, it is better to insist on isolation and treatment away from home; and this may be sometimes necessary from other causes, such as the presence of injudicious relatives.

Gentle rubbing of the whole body or the sheet-bath once or twice a day are often efficacious. Small doses of bromide, with or without antipyrin, are useful and may be combined with quinine, or the bromide of strontium given with dilute phosphoric acid or a small dose of dilute nitro-hydrochloric acid. Strychnine is occasionally of service, but must be used with caution, as in many cases it aggravates the symptoms. The routine use of alcohol is not advisable, but a dose given medicinally sometimes relieves nervousness and promotes sleep. For insomnia the sheet-bath given in the evening, hot sponging to the spine, or a wet pack are all useful measures, to be reinforced in case of failure by a dose of sulphonal or trional.

In these acute cases treatment by rest requires to be continued for a longer or shorter time, according to the severity of the symptoms, and as a rule the result is favourable; should,

however, the illness show signs of passing into a chronic phase, treatment on the lines given below must be carried out.

In all cases of neurasthenia as in those of hysteria it is necessary, first of all, that the physician should gain the patient's confidence. This is to be done by listening patiently to his statements and making a careful physical examination. Many patients nowadays realise the difference between disease depending on functional and that on structural alterations. It is sometimes well therefore to explain to them the nature of their symptoms, to hold out to them the possibility of cure or prospect of recovery, and to show them the reasonable ground for the treatment proposed. A sufferer from neurasthenia, genuinely anxious to recover, as is usually the case, and not merely a person "who enjoys bad health," will appreciate the attention given to his case, will give his confidence to his medical attendant, and enter on the scheme of treatment with that hopefulness of cure which is the first step to attain it. In neurasthenia, more perhaps than most diseases, success in treatment depends upon a patient and thorough investigation of the symptoms, of the conditions under which they have arisen, of the circumstances of the patient's life, his habits and surroundings, and an appreciation of his capabilities, both mental and physical. The treatment must be adapted to the ever different conditions and requirements of

each individual patient. Careful observation for some little time is often required to get that knowledge of a case which is an essential preliminary to the carrying out of the treatment appropriate to a particular condition present.

In severe cases of neurasthenia the most effectual means of cure is the Weir-Mitchell treatment, the details of which have already been given. This treatment involves great expense, and is irksome to the patients. It is therefore very important to decide in what cases it is absolutely necessary. Unfortunately it is difficult to formulate exact rules as to the selection of cases in which this method of treatment is essential. It is indicated in severe cases of neurasthenia with persistent vomiting or anorexia, in cases accompanied by decided emaciation, in those with much anxiety, or in whom morbid fears and hypochondriacal obsessions are persistent ; in cases with marked cardiac symptoms, or pains in the back which prevent movement, and in some, but not all, cases of cerebral exhaustion. The treatment is also to be carried out, modified to suit the special indications, in the case of patients who have become, as a consequence of their illness, addicted to alcohol, morphia, chloral, sulphonal, &c. As a general rule the longer the disease has lasted the more necessary it will be to adopt the Weir-Mitchell treatment, and in some cases, when it might not otherwise be essential, it is advisable on account of the

home surroundings, such as the presence of too sympathetic and indulgent relatives, or, on the other hand, of uncongenial ones who are incapable of understanding the nature of the illness. Patients whose nutrition has suffered, who are thin or emaciated and are suffering from excessive weakness, are those who are likely to derive most benefit from the cure. Those who suffer from cerebral symptoms, but whose general condition and muscular strength are well maintained, are not so likely to derive benefit from it.¹ The Weir-Mitchell cure is especially successful in treating cases of neurasthenia in women, and is not so often adapted, speaking generally, to male cases of the disease.

Although, as above stated, patients whose nutrition has suffered do best, there are certain cases where the patients have large deposits of unhealthy fat, resulting from the taking of a full amount of food, whilst at the same time they have been confined to bed for long periods on account of spinal or cardiac symptoms, which they have believed to be indications of organic disease of the heart or spine. In such cases the treatment is extremely successful, but the diet requires some modification, and the accumulation of fat must be rubbed away by massage.

As a rule the full treatment should be rigidly carried out, as any deviation from the essential

¹ See on these points Professor Clifford Allbutt, art. Neurasthenia. Allbutt's "System of Medicine," vol. viii.

points of rest, isolation, overfeeding, and massage, is apt to entail failure. Neurasthenic patients, however, have often been waited upon hand and foot for a long time by a devoted mother or other relative, and consequently sometimes feel the isolation so acutely at first that their nervous condition is rendered worse, or they refuse to stay under treatment. Sometimes it is then advisable to modify the seclusion. A plan which has not hindered a successful issue in my experience, has been to allow a visit once or twice a week from a friend or relative, one being selected who is known to be judicious and to be fully alive to the necessity for carrying out the treatment.

In severe cases, where the medical attendant as the result of careful consideration has come to the conclusion that the Weir-Mitchell treatment is absolutely necessary, but in which the patients themselves, or their relatives, refuse to consent to it, the same course of action should be taken that has been already advised (see p. 156) under similar circumstances in hysteria.

There remain those cases in which the disease does not take so severe a form, and in which the full Weir-Mitchell treatment is not needed, and those in which for various reasons it is not considered suitable.

In the treatment of these patients rest is probably necessary at first, and most of them will derive benefit from a short stay in bed.

In brain-workers who have become neur-

asthenic, preliminary treatment by rest in bed is most beneficial; the same applies to cases with anginal pains or cardiac symptoms, and to those with dyspepsia or some atonic dilatation of the stomach. It is a mistake to tell the man with an over-worked brain to straightway take more physical exercise; the patients themselves often seek to cure their symptoms in this way before they come for medical advice, and the result is aggravation instead of relief of their troubles.

All business must of course be stopped during the period of rest, which need only entail absolute rest in bed for a short time: directly the symptoms begin to improve the patient should spend the day on a couch, and then go for drives in the open air. During this rest various therapeutic measures may be carried out. General massage may be employed once a day, at first for thirty minutes, then gradually extending the time to fifty minutes. Some form of douche or bath should also be given. The sheet-bath above described is useful to begin with, or the patient may sit in a bath, and the water be sprayed over him from a douche at a temperature of 60° for not more than thirty seconds, or if this is not available water may be allowed to run over him from a large sponge.

The diet, whilst being light and digestible, should be as abundant as the patient can assimilate. A full and nutritious, but at the

same time easily assimilated, dietary is an essential point of treatment. It will be better to defer the consideration of the diet in cases with gastric dilatation.

As soon as the patient has improved under preliminary treatment on the above lines, has begun to recover his moral tone, and his chief symptoms have become mitigated, it will probably be advisable for him to seek change of scene. At first he will often derive benefit from a course of hydro-therapeutics or electrical treatment, for which he may go to a health resort. In the summer these places which lie high and have a bracing air are most suitable. Residence, however, in a hydropathic establishment or similar institution is not to be advised for more than a short time, from four to six weeks, for, as Dr. Dana (*loc. cit.*) says, these places are apt to contain too many patients of the same kind, who discuss their ailments one with another, and by such discussions tend to accentuate and perpetuate them.

A course of hydro-therapy or of electrical baths, of which the sinusoidal bath is most effectual, is undoubtedly in many cases of great value at this stage, and the course of treatment may be completed by a tour or a visit to a mountain district.

Change of air and scene is undoubtedly of the greatest benefit in neurasthenia, especially in those who are suffering from overstrain, and

from arduous or sedentary occupations. Travelling, however, may easily be overdone, and more harm than good is often the result of sending neurasthenic patients off at once on a tour, which involves an amount of fatigue and exertion for which they are quite unfitted. If, however, a preliminary course of treatment, varying in duration with the severity of the case, is first carried out, then, when the patient has been got into a better state of health, he is able to gain the full benefit from change of surroundings, and to a certain extent, of habits. It is, however, rarely advisable that much travelling should be undertaken. It is better that the patient should stay for a time at one place, and then, when he is tired of it, move quietly on to another.

As to the choice of place, there is no doubt that mountain or moorland air is the most suitable. Neurasthenic patients are often particularly sensitive to the discomforts often felt by healthy persons when they first arrive at a high altitude, and may also feel such symptoms at a less height than that at which ordinary persons would be affected. It is therefore generally advisable for the patient to go to lower altitudes at first, and then gradually work his way up to the higher mountain resorts if it is thought desirable. The best results are attained by residence in a place which provides bracing moorland or mountain air, is sheltered from strong winds, with wide views and easy walks

over the moors, and in which it is possible to remain outdoors during the whole or greater part of the day. At first the invalid should not take much exercise, and it is essential for him always to stop short of fatigue, but his walks or climbs can be gradually extended. An open-air life of this kind soon results in improvement, especially with regard to headache, pains in the limbs, muscular feebleness or twitchings, and dyspepsia. Insomnia is often the most troublesome symptom, and may be the last to disappear. It may be aggravated by residence amongst the mountains, and if it persists the patient must return to a lower level.

Residence in mountain air is not to be regarded as a sole means of cure, but most generally as a finish to a preliminary course of treatment.

As a general rule residence at the seaside is not so beneficial in neurasthenia as moorland or mountain air, and some patients are made decidedly worse by it. Those who are easily over-excited are especially apt to suffer from insomnia and increase of excitement, and from unpleasant feelings in the head during the evening. Professor Allbutt (*loc. cit.*) points out that the same objections do not apply to residence one or two miles back from the sea. In other cases, however, especially in those associated with anæmia, with great muscular debility, or exhaustion from excessive brain-work, the seaside is productive of much benefit. Sea-bathing is not advisable,

unless recovery is well advanced, and often not even then.

In many cases there is no doubt of the good to be obtained from a long sea voyage in a well-appointed ship. The conditions of life at sea, with the good food, increased appetite, enforced rest and seclusion from outside news and current events are all points which should *a priori* be favourable to the relief of neurasthenia. Patients, however, who suffer from marked depression, or from fits of anxiety or morbid fears, are not suitable cases for a sea-voyage, and the very monotony of life at sea has on some an intolerable effect.

Residence in some country place, amongst the sights and sounds of a country life, whose quiet influence may permeate the tired brain, and exert a soothing influence on jaded nerves, must be mentioned as one of the most valuable means of treatment, and one fortunately within the means of all classes, and without the drawback of a long and expensive journey.

In other cases, and those mostly of the less severe type, in which the disease has been brought on by overstrain, or by the too exclusive concentration of the mind on one pursuit, the chief measure required is systematic guidance to a properly directed activity, adapted to call into use the organs least affected, with at the same time advice how best to avoid injurious influences.

Although in most cases it is absolutely necessary to interrupt all work for a time, after a period of rest, of a duration varying with the nature and severity of the case, in some quiet place, or occupied by a carefully planned and leisurely executed tour, the patient can with due precautions return to work. The proper course for such a patient to adopt is so to regulate his work as to bring it within his powers. To this end when a man returns to business it is better for the doctor to limit the hours of work rather than to say what he shall or shall not do ; it is impossible to ensure that exact directions of the latter kind can be carried out, whilst a limitation of the working hours ensures that sufficient time is left to be apportioned between exercise, rest, and sleep. It is often well to insist on one hour's complete rest, before or after lunch, and again between five and seven. In cases with hypochondriacal tendencies occupation of some kind is especially advisable in order to take the patients' attention off their symptoms.

With regard to occupation or recreation in cerebral neurasthenia, physical outdoor exercises are most useful, if kept within proper limits, muscular over-exertion being hurtful and retarding recovery. Such outdoor occupations as take up the attention and give a moderate amount of exercise are the best. Golf, cycling, and fishing are especially good, and for younger

patients games like lawn-tennis. Riding is also well adapted for these patients if their means allow it. Cycling in moderation perhaps fulfils the greatest number of indications, except in the case of those women who cannot overcome their nervousness. Walking suits some patients, but in the majority fatigues too much and leaves too much opportunity for introspection. Cases with pronounced muscular weakness or spinal symptoms require more sedentary occupations, and physical exertion is here to be reduced to a minimum until decided improvement occurs, meanwhile any æsthetic tastes such patients possess may be utilised and developed.

With regard to food, a mixed diet is the best. Neurasthenic patients require to be well fed. In patients who suffer from severe and frequent headaches and from the uric acid diathesis the amount of proteids must be restricted. Strict moderation in the use of alcohol, tobacco, tea, and coffee is to be enjoined; as a rule the two latter should not be taken late in the evening. Advice as to alcoholic stimulants must depend on the patient's habits; a small amount taken with the meals does no harm; it is doubtful whether it does any good, except in so far as a glass of light beer or wine at meal times improves the appetite. In most cases of neurasthenia there is little or no inclination for sexual intercourse, but if necessary the patient should be cautioned against sexual excess.

Some form of hydro-therapy is advantageous. The sheet-bath above described may be given on rising from bed, or the following bath which is recommended by Löwenfeld.¹ The patient sits up to his middle in water, whilst an attendant dashes the water over his chest and back; he then rubs himself, or is rubbed, all over with a loofah or rough towel, and in cases of weakness of the legs or arms these limbs are especially rubbed. After this the whole body is immersed in the bath, and finally a cold douche thrown over the head and neck. The whole duration of the bath is six minutes. Temperature of bath, 72° to 86° F.; of the douche, 8° to 10° lower.

Or a cold or tepid plunge bath in which the patient rubs himself all over for a few minutes may be followed by a cold shower bath for a few seconds, and then by friction with a rough towel.

Whichever form of bath is used, it should be followed by a good reaction, otherwise it must be discontinued.

These baths can be carried out at home, and are therefore useful in the later stages of treatment, or after return to ordinary life.

Massage may be employed during the same periods, or earlier in the case; in the later stages or in convalescence it is especially useful in cases of myelasthenia, of pronounced muscular weakness, of tremor or muscular twitchings. It may be given four or five times a week, preferably in

¹ *Loc. cit.*

the morning, in which case care must be taken that the patient rests for a sufficient time afterwards, or before retiring for the night. Special attention should be given to the parts most affected; deep abdominal massage is of service in combating constipation.

Electrical treatment is often a very useful general measure. The best form is the bath, using the sinusoidal current, or that obtained from a secondary coil, the primary coil being connected with the alternating current from the mains. The bath must be capable of complete insulation, and the current conveyed to the water by large electrodes placed at the ends of the bath, the one at the head being protected by a wooden frame against which the patient's shoulders and head rest. If the ordinary bath cannot be insulated, a large wooden trough will do quite well. The current used should be just strong enough to be felt, and the duration of the bath ten to twenty minutes. These baths undoubtedly give good results in cases of general, cerebral, and spinal neurasthenia. The latest development of this form of electricity in treatment is the use of a polyphase or triphase current, which is stated by Dr. Herschell¹ to be the most effectual; it is said to raise the blood-pressure and to have a remarkable effect upon unstriated muscular tissue, and therefore to be especially useful in gastric atony and atonic constipation. It is

¹ "Polyphase Currents in Electrotherapy." London, 1903.

not suitable in cases in which the arterial tension is raised.

If the sinusoidal current cannot be used, the faradic current may be employed in the form of a general bath, or general faradisation by ordinary electrodes. This is useful in general muscular debility, and also for local application in cases of troublesome tingling, pricking, or numbness of the hands and feet, or of the limbs.

Special Applications of Electricity.—For vertigo and head-symptoms the passage of a weak constant current through the head may be employed. The current should not exceed 2 to 5 ma. in strength, and the electrodes should be of large size and applied above or behind the ears. Relief to vertigo and to persistent cephalic sensations is not unfrequently given; but care is necessary in the application of the method, especially that the current is not suddenly made or broken.

The constant current may also be applied over the vagus in the neck in cardiac cases, a method of which Dr. Allbutt¹ speaks with approval. Löwenfeld² also recommends the passage of a constant current down the spine in myelasthenia and in general neurasthenia. In sexual cases galvanisation of the lumbar portion of the cord is sometimes useful.

A few additional observations on the treatment of certain symptoms are required.

¹ *Loc. cit.*

² *Loc. cit.*

Morbid Fears.—Improvement of these very troublesome symptoms, which often take such a form as to prevent the performance of the daily duties, proceeds as a rule with relief of the general condition. If, however, this is not the case, and after a fair measure of recovery of ability for bodily and mental exertion, some fear remains which interferes with the profession or occupation, and if at the same time the patient is intelligent and can understand the nature of his disability, he should be encouraged to make the effort to go on with his work in spite of it—that is, to fight it down. This is not an ideal plan, for though the task may be successfully accomplished, it is at the expense of much physical and mental perturbation, and for a long time, probably from the effect of association, the fears will return on each occasion, although they have been surmounted successfully before. Such efforts are, I believe, the only means of recovery in some cases, but they should not be made unless the general health is fairly good, or, in more severe cases, until a certain amount of progress towards recovery has been accomplished. Gradually the patient learns to overcome his former dread, and the process is one which is helpful to him in regaining self-control. To be able to make the struggle is the next best condition of mind to that in which no struggle has to be made.

Insomnia often requires special treatment. The return of natural sleep is one of the best

signs of improvement. So far as possible hypnotics should be avoided. Other measures may be adopted, such as a wet pack, or hot bathing to the spine at bedtime; those who wake very early in the morning should take some light food, after which they will often sleep. Valerianate of zinc given as a tonic three times a day is often useful indirectly in promoting sleep. It is sometimes, however, necessary to give hypnotics, especially at the beginning of treatment. Often a dose of bromide at night is efficient, and is the most harmless. Of others, sulphonal, trional, and chloralamide are perhaps the most useful; in my experience in this order. In cases with depression a full dose of Liq. Opii. Sedativi or Nepenthe, followed by a saline aperient the next morning, often gives good results and may be continued for short periods of time. Any preparation of opium or morphia, however, should be given with due precautions to prevent the formation of a habit, and only by the direct order of the medical attendant.

Cardiac Symptoms.—In cases where heart symptoms are pronounced, a rest cure is generally essential. In the later stages of the cure, especially in patients with a rapid pulse, the Nauheim baths and exercises are of great value. The baths can be carried out at home or in a nursing institution, or the patient may go for a course of them to some bracing health resort. This treatment, besides its undoubtedly good

effects on the heart and in slowing the pulse, has the further advantage that the patient feels that something is being done directly for the relief of his most distressing symptoms. In the late stages of treatment a regular course of graduated walks, first on the flat, then up hills of increasing steepness, should be prescribed. Arsenic, strophanthus, and caffeine, with small doses of nuxvomica, are the most useful drugs. Caffeine must be given with care, as it may increase insomnia and restlessness. The nitrites are useful in relieving pain, especially in vaso-motor angina.

Dyspepsia.—The milder forms will be treated by the ordinary remedies. Arsenic, taken in a course of some weeks' duration, as recommended by Professor Allbutt,¹ is of great value. Many of the cases formerly described as "lithæmia," a condition attributed by Murchison to disordered liver, are neurasthenics. In these cases dilute nitro-hydrochloric acid or ammonium chloride with sodium bicarbonate are the best medicines. When dyspeptic symptoms are due to decided dilatation of the stomach, and when the passage of a stomach-tube at different times in relation to meals shows that the stomach does not empty itself, the stomach should for a time be washed out before breakfast every morning or every alternate morning. When, in addition to dilatation, a chemical examination reveals a defi-

¹ *Loc. cit.*

ciency of free HCl in the gastric juice, a mixture containing ac. hydrochlor. dil. ℥ x.-xv., liq. strychn. ℥ v., ac. carbolic gr. i.-ij., aq. chlorof. ℥ ss. may be given in ℥ i. of water 20 to 30 minutes after meals. A dose of a fluid preparation of pepsin may be added to this, if pepsin, as is rarely the case, is also deficient.

I have not found faradism or galvanism of the stomach through the abdominal wall of any value in this condition ; the sinusoidal current, however, in the form of a bath with one of the large electrodes placed over the stomach appears to cause contraction of the walls of the viscus, and the triphase or polyphase current mentioned above is said to be especially valuable in producing contractions of the stomach and intestines. The diet in dilatation of the stomach should consist of easily digestible food, which does not leave much indigestible residue. Much starchy or saccharine food is not good, because of its tendency to undergo fermentation ; the meals should be few in number ; three a day are sufficient ; no food is to be taken between meals ; as little fluid as possible at meal-times, and to make up for this half a pint of hot water should be drunk on rising and at bedtime, or in the morning a very weak, freshly-made cup of tea may be taken instead.

In the less common cases in which free HCl is in excess, proteid foods are generally well digested ; alkalies, especially perhaps milk of

magnesia, in large doses, are useful, given after meals at the time when pain occurs, as a palliative to neutralise the excess of acid.¹

In all cases of neurasthenia it is necessary to secure a regular evacuation of the bowels, and to combat the constipation which is so frequent. In doing this, strong purgatives should be avoided. Careful regulation of the diet, massage, and exercises adapted to strengthen the abdominal muscles are often of great service to this end.

Medicinal Treatment.—Lastly, in addition to what has been stated above, the medicines most generally useful in neurasthenia are arsenic, to be given after meals for a course of some weeks; valerianate of zinc in pill, with a small dose of quinine or iron, or, in cases with intestinal discomfort and much flatulence, combined with asafoetida; and the compound syrup of the hypophosphites and of the glycono-phosphates. Cannabis Indica and sumbul are occasionally useful. Dilute phosphoric acid or dilute nitro-hydrochloric acid are serviceable, the latter in cases where there is much digestive disorder; the mineral acids, however, should not be given for long, and as a general rule do not suit these patients so well as alkalies, such as bicarbonate of soda, with infusion of gentian. In cases of general neurasthenia, and in those with much

¹ Such cases often obtain great relief from $\overline{3}$ ss.— $\overline{3}$ i. olive oil, taken in milk just before meals.

pain in the back and limbs, the combination of ammonium bromide and salicylate of soda in 10-grain doses three times a day, with or without a small dose of nux vomica, is often of great advantage when given for short periods; and in all forms an occasional dose of bromide is serviceable.

With regard to strychnine, it should always be given with caution, in small doses at first, until the effect has been tried in any particular patient. As a rule it does not suit neurasthenic patients, exception being made in my experience for those with gastric dilatation.

Lastly, although in the care of neurasthenia so much depends on moral treatment and general hygienic measures, and sound advice is more valuable than medicine, it is not to be supposed, because drugs take a secondary place in the measures recommended, that they are of no value. On the contrary, much can be done by their judicious administration.

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